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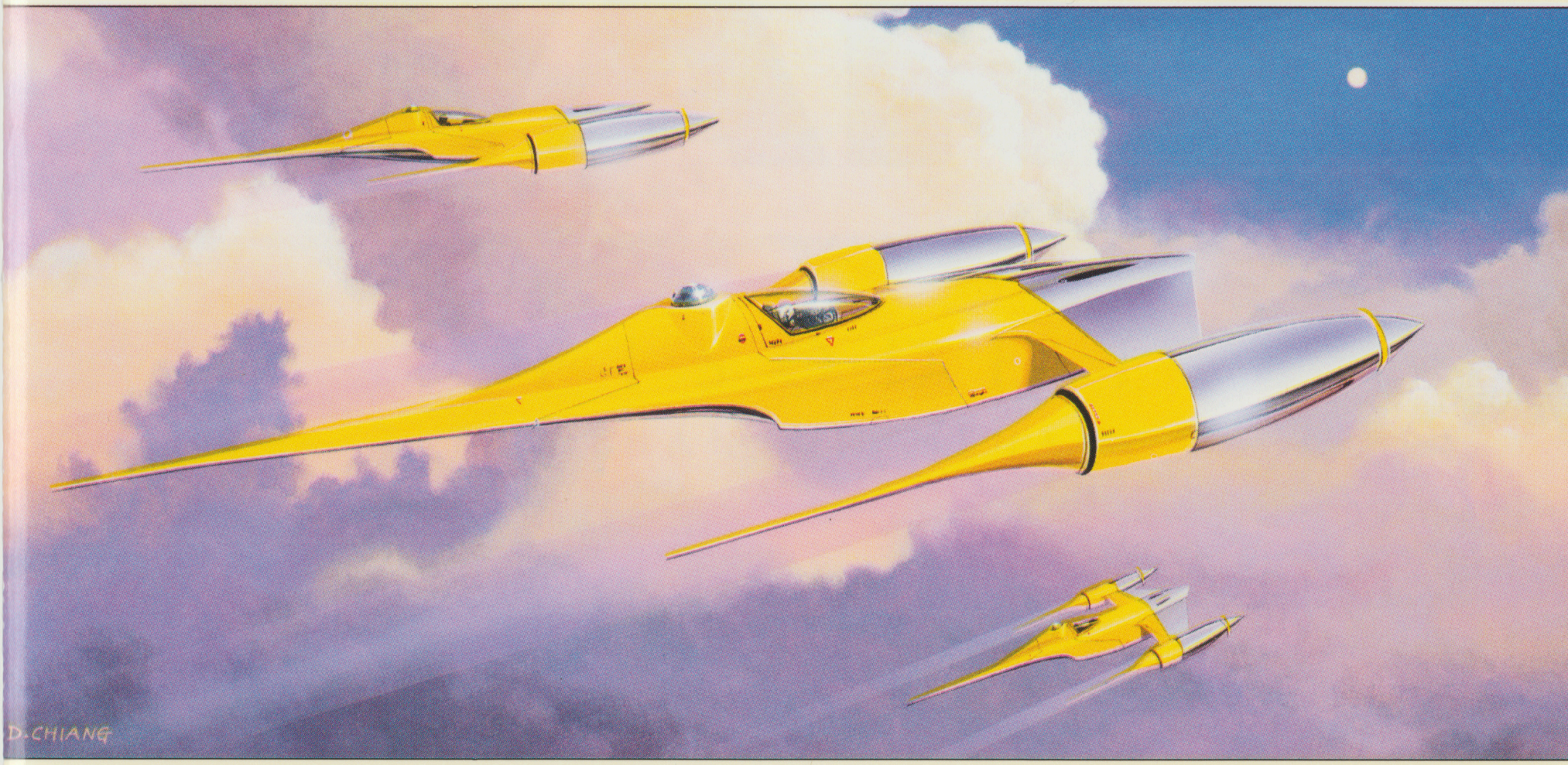

EPISODE I

THE PHANTOM MENACE™

AN EXCERPT OF THE BOOK WRITTEN BY JONATHAN BRESMAN

PRODUCED EXCLUSIVELY FOR
THE WIDESCREEN VIDEO COLLECTOR EDITION

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Preface

In 1977, George Lucas, a director primarily known for *American Graffiti*, a nostalgic film about early '60s small-town California teenagers, stunned audiences with the release of *Star Wars: A New Hope*. A fusion of fable, fairy tale, and classic movie serial, Lucas had created a universe remarkable for both its epic scope and meticulous detail.

While moviegoers the world over marveled at what Lucas had wrought, George himself remained somewhat unsatisfied with the results, yearning for a palette far beyond the capabilities of 1970s special-effects technology. That remained the case for two decades—it wasn't until the 1997 release of the digitally-enhanced *Star Wars Trilogy Special Edition* that the state of the art finally advanced to the point where Lucas could construct a cosmos without having to compromise. And so, fully-armed, he set to work on *Star Wars*: Episode I *The Phantom Menace*.

Lucas began by searching for a team of conceptual designers who could develop every last corner of the *Star Wars* universe. Expanding on the work of such greats as Ralph McQuarrie and Joe Johnston, a new generation of artists would envision new worlds, new characters, and new societies.

However, universe building can be a grueling process. As the process began, each element existed only in the mind's eye—in this case, the mind of George Lucas. So each artist knew he might be called upon for more than expertise with pen and paper. He or she might be asked to become an interstellar anthropologist, zoologist, or engineer, an expert in imaginary cultures, customs, and architecture.

Thus, it became the lot of the conceptual artist to figure out what the director would want, perhaps even before the director necessarily knew he wanted it. The director, in turn, would review each and every rendering, making alterations and asking for revisions, guiding the evolution of his universe.

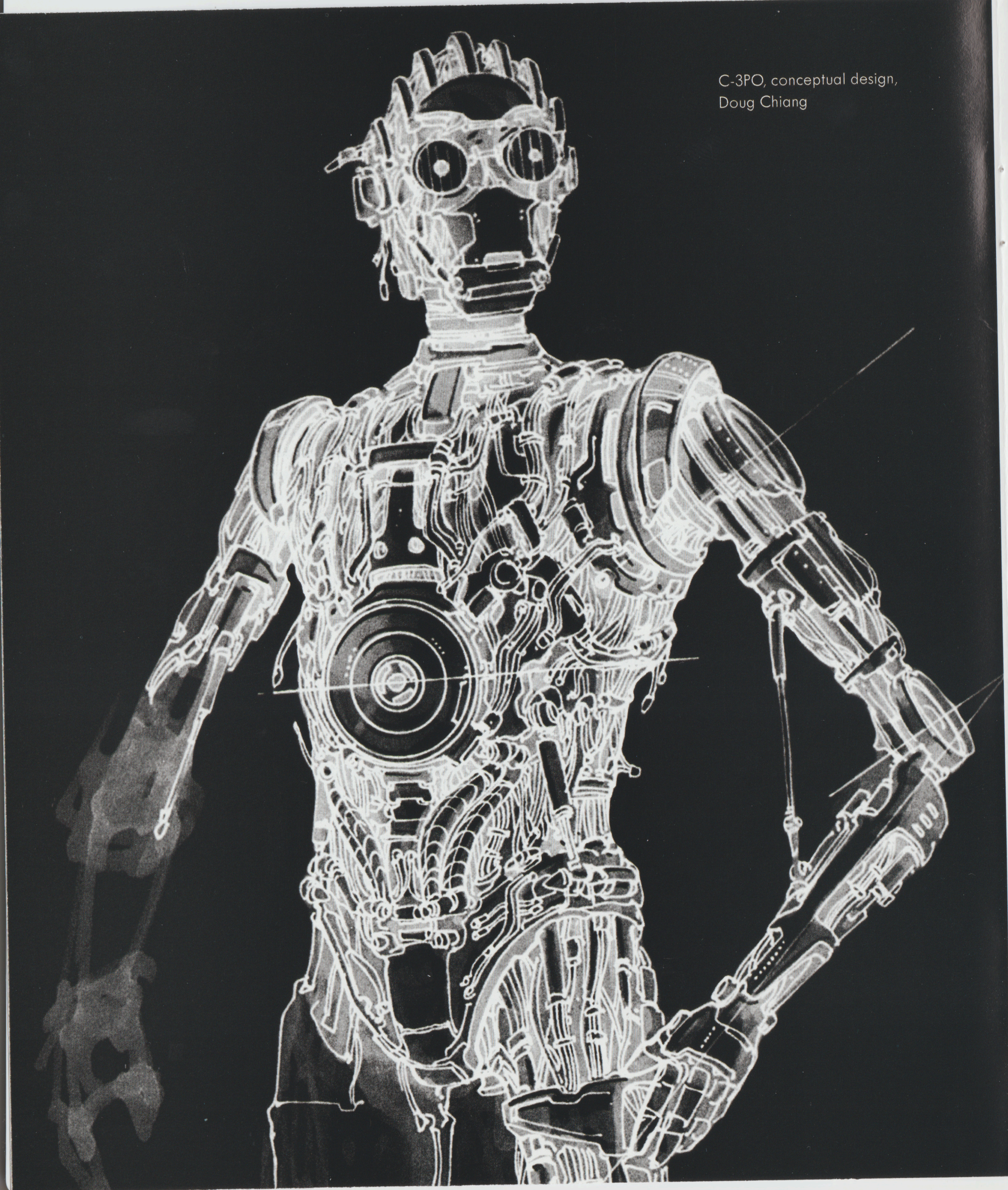
This conceptual evolution normally takes place after the script has been finished but before the filming has begun, so the director can amass all the raw materials he will need to give his characters form, and to place them in a context through which they will spring to life. On Episode I, however, much of the conceptual artwork was created in concert with the storytelling, and it continued to evolve throughout the production of the film. Because computer graphics technology allowed him to create and explore new photo-realistic effects, Lucas could continue to tweak his ideas and modify the look of the film the entire time—even after he had finished principal photography.

As a result, every aspect of Episode I has a finely crafted look to it. Led by design director Doug Chiang, and production designer Gavin Bocquet, dozens of artists continuously visualized and polished the film's look over the course of four years—a nearly unprecedented amount of time to have an art department working on one film.

This book offers a behind-the-scenes look at the lengths to which the art department went in its construction of George Lucas' universe. The evolutionary stages for each major character, vehicle, and planet are displayed, so that the reader can get a sense of how the film was painstakingly sculpted, and, finally, how a new style of filmmaking was founded.

Jonathan Bresman

Jonathan Bresman
San Francisco
May 1999



C-3PO, conceptual design,
Doug Chiang

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Darth Maul, conceptual design
Iain McCaig

The first image of Darth Maul nearly ended up in the trash. McCaig had been dissatisfied with a drawing (based on his own face), and angrily blotted ink all over it. The ink patterns reminded him of the tattoos he had created for the "evil senators," and soon Darth Maul was born. At first the protrusions on top of Maul's head were not horns, but feathers attached by coils of wire which cut into the flesh. These soft feathers, along with the touch of beauty McCaig added to the face, lend an element of seduction to the dark side.

Foreword

During the autumn of 1994, George Lucas announced that he was writing Episode I and was staffing up an art department for the first of three new prequels. For many designers and artists who grew up as the *Star Wars* generation, myself included, it was the opportunity of a lifetime.

The news spread rapidly, and soon hundreds of portfolios were submitted for consideration. By January of 1995, the art department was formed and the daunting task of translating George's vision began. The Episode I art department grew from a small staff of two, myself and Terryl Whitlatch, to as many as seventeen during our peak. Our talents varied as much as our individual personalities. Some of us were passionate creature experts, while others focused on costume design, and still others on hardware. It was my responsibility to supervise and channel this diversity of creative energy in a cohesive direction so as to fulfill George's vision.

It was my pleasure to work with some of the most talented artists in the industry in an environment filled with energy and inspiration. For me, it was like attending the best art and film school one can imagine, with George as our mentor. We fueled each other's creativity as ideas jumped from one drawing board to another to combine and grow.

For more than three years following, the art department and I designed everything from battleships to belt buckles to buildings. We adhered to George's design philosophy of combining, in unusual ways, seemingly unrelated concepts to create striking forms. Thousands of sketches, models, and paintings were developed as we tried to create the world of Episode I. In order to create a future, we looked into the past, and drew inspiration from history and nature in order to give our fictional creations a realistic foundation.

We strove to create designs that would elicit intellectual as well as emotional responses. Certain forms convey aggression, while others invite comfort. Imbuing our works with these traits enhances their effectiveness. The MTT troop transport vehicle, for instance, was designed to subliminally resemble a charging bull elephant. Although not immediately recognizable, these elephant features, on a subconscious level, reinforce the MTT's fearsome quality.

At times, when we struggled with challenges that seemed too daunting to overcome, the clarity of George's vision always guided us. George had an uncanny ability to strengthen a design by modifying or adding an element. We struggled, for example, to find Sebulba's ideal Podracer engine configuration. After trying various orientations, I presented to George our two best options and asked which solution was better. George chose neither. Instead, he took the model and aligned the engine cowlings into an "x" shape. This new configuration transformed the meek engine into an aggressive, sleek configuration more fitting of the champion's personality. It was the perfect answer—and typical of George's clarity.

George taught us many things about successful film design. Design needs to be more than just beautiful art. In addition to being aesthetically pleasing, it needs functionality. And foremost, the design needs to support the story rather than detract from it. In every instance, we sought to determine whether a design was successful, while at the same time determining whether or not it was appropriate to the story. This was one of our main challenges in designing Episode I, where most aspects of the film's reality needed to be conceived and created from scratch.

What you see in this book are examples of our focused experimentation. You will see the development of ideas, how sketches combine and evolve with others into the final concepts. As we designed, we never lost sight of our goal—to create a look distinct from, yet consistent with, the original *Star Wars* trilogy. The artistry of the previous *Star Wars* artists and designers set the standard for us, and we hope these images share with you some of our joy in designing for Episode I.

D.CHIANG

Doug Chiang
Skywalker Ranch
May 1999

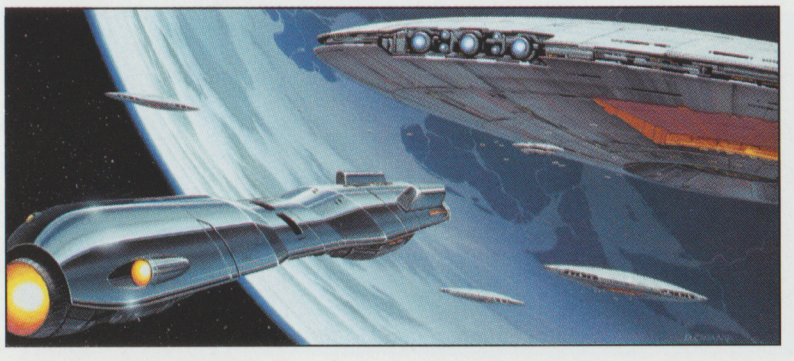
1

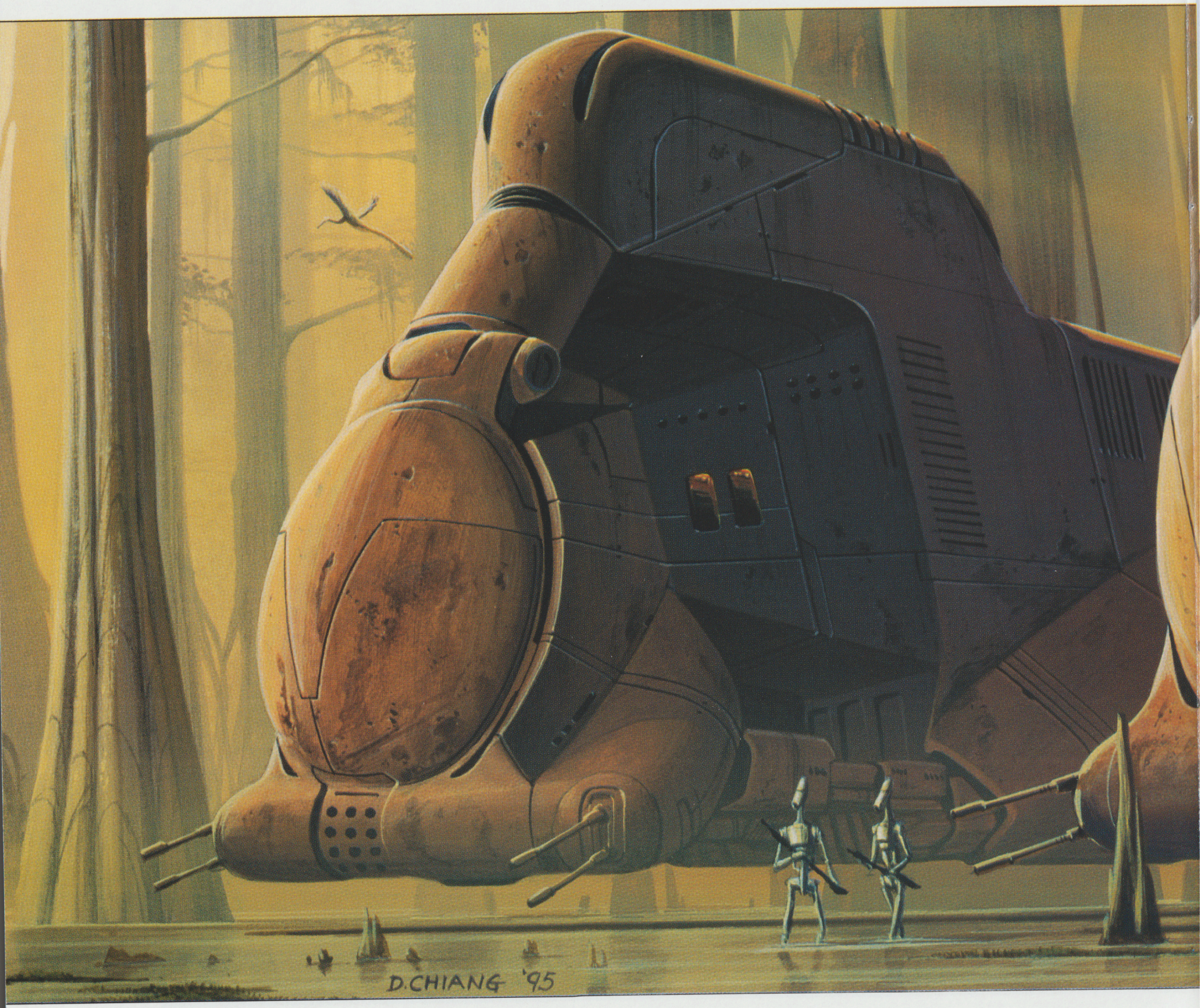
The Republic Cruiser,* Radiant VII, *approaching the Trade Federation battleship, initial and final production paintings
1, 2 Doug Chiang

In the opening shot of the film, the Trade Federation battleship, disguised as a freighter, looms menacingly over the peaceful world of Naboo. Chiang gave these ships their intricately rendered surfaces by using acrylics, which allow for fine detail work.

D.CHIANG

2

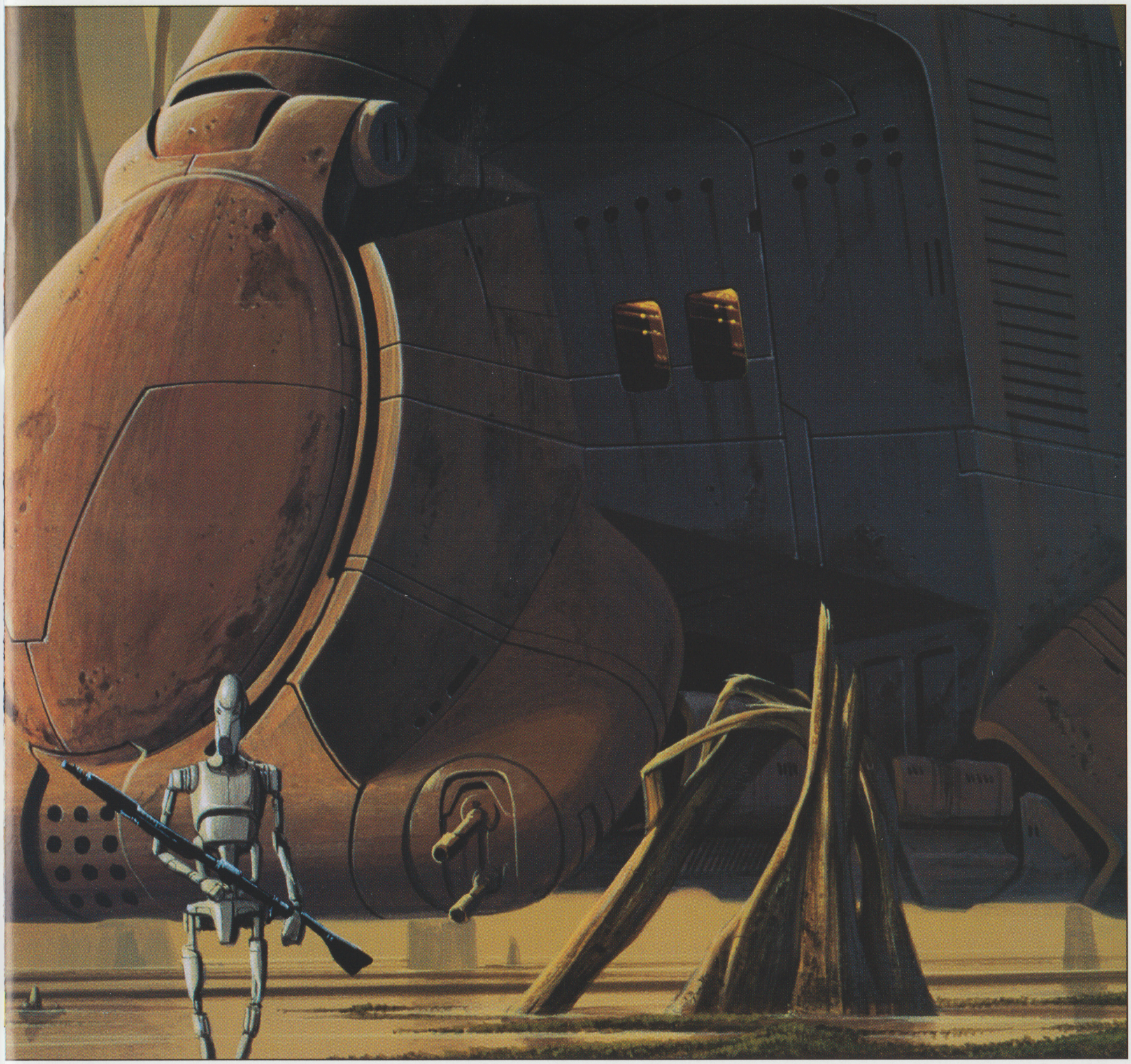




1

MTTs invading Naboo, production paintings
1, 2 Doug Chiang

In this version of the swamp chase (2), Jar Jar and Obi-Wan are chased by the MTT—not Jar Jar and Qui-Gon. Qui-Gon had yet to be added to the cast.



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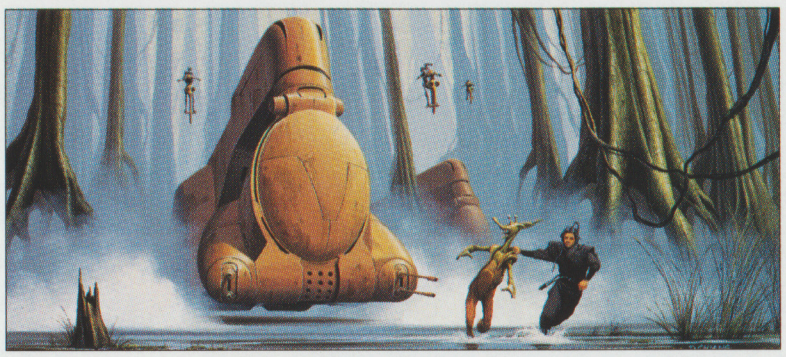
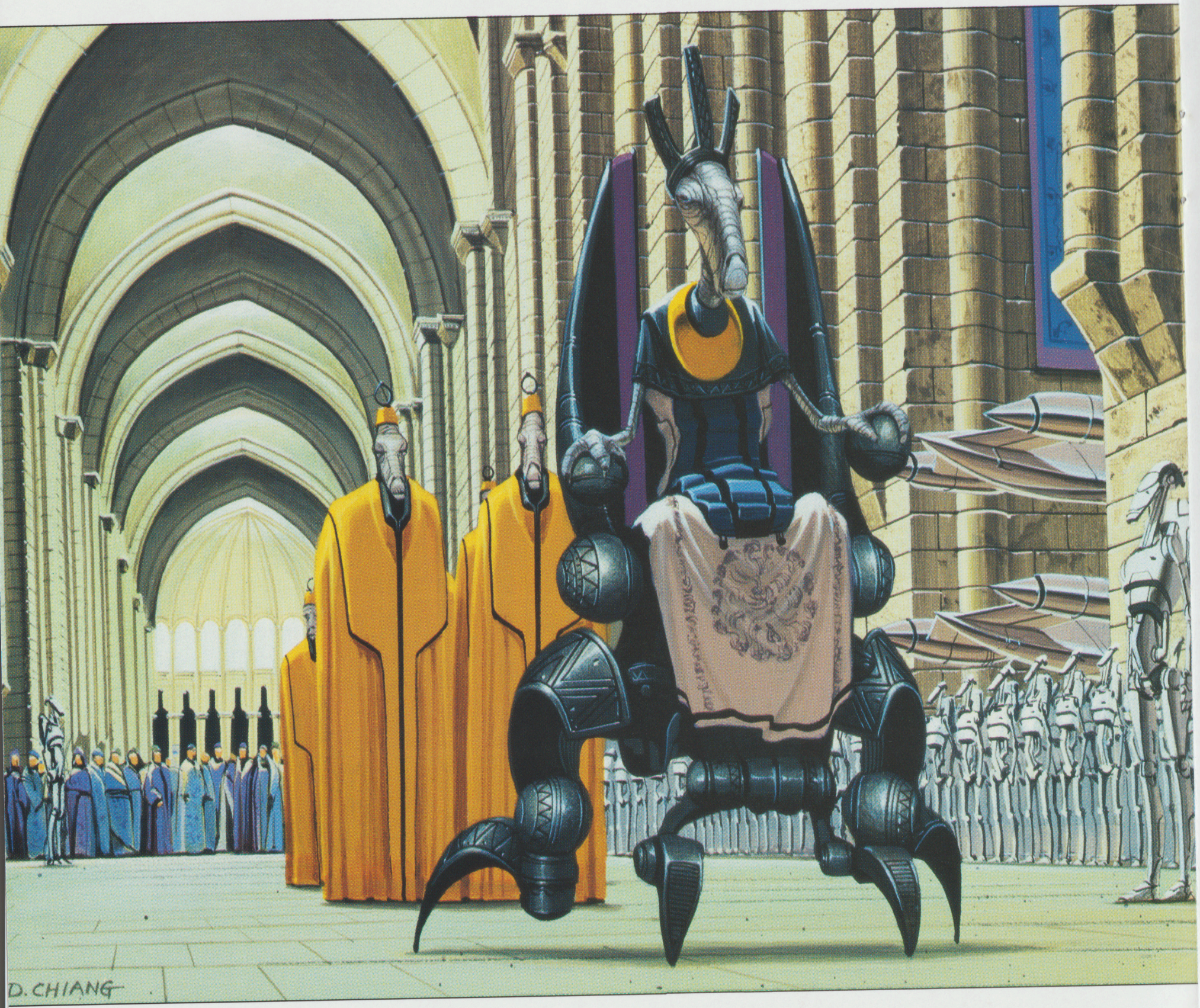




1

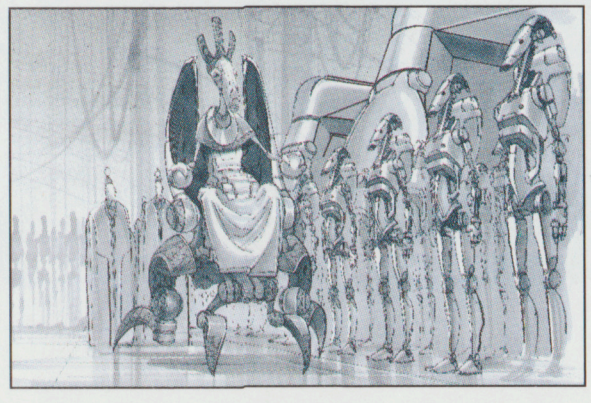
Nute Gunray's troop inspection
1, 2 Doug Chiang

Surveying the captured Theed hangar, production painting (1)

The Trade Federation landing ship hangar on the eve of invasion, conceptual design (2):
When this sketch was drawn, Lucas had yet to describe the scene, so Chiang began toying with some ideas of his own, and ultimately, this sketch evolved into a key production painting (1). According to Chiang, "This image demonstrates the

design philosophy of Episode I: combine different textures and styles to create a timeless whole. The hangar's old stone architecture is contrasted against the chrome starfighters and the unusual technology of the Trade Federation. All these elements come together to create a fantastic, yet convincing, fictional reality."

2

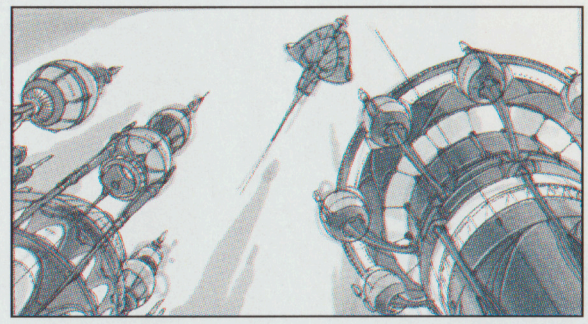


1

Otoh Gunga
1, 3–6 Doug Chiang
2 Gavin Bocquet/David Dozoretz

Early conceptual designs (1, 3–6) and digital model (2)

2



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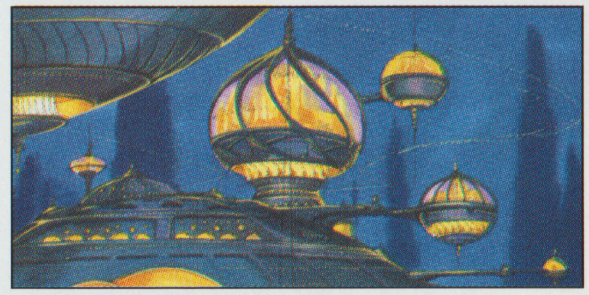

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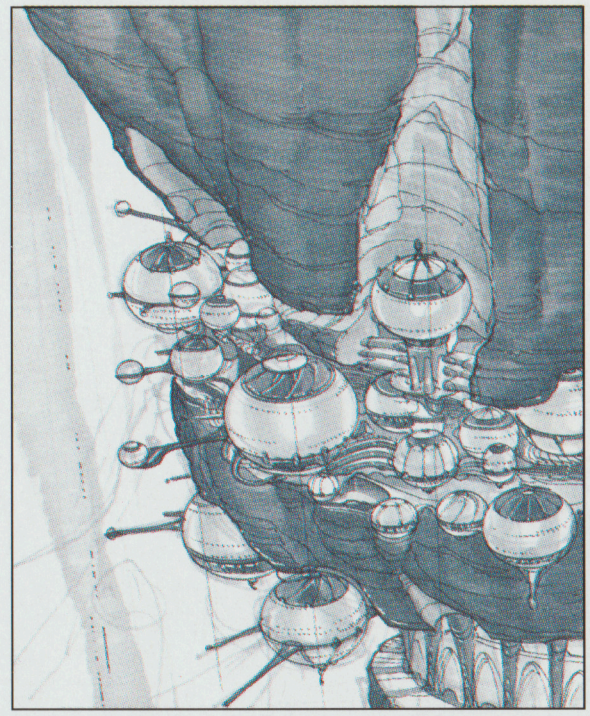

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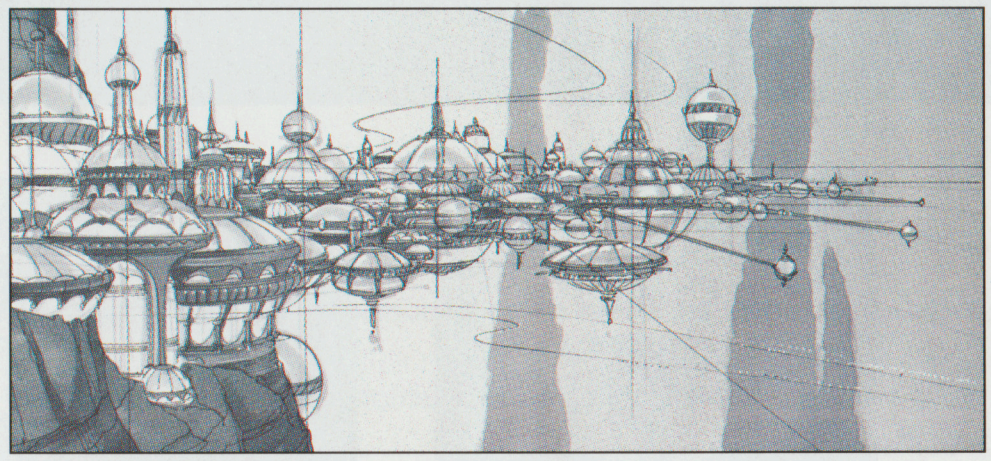


6

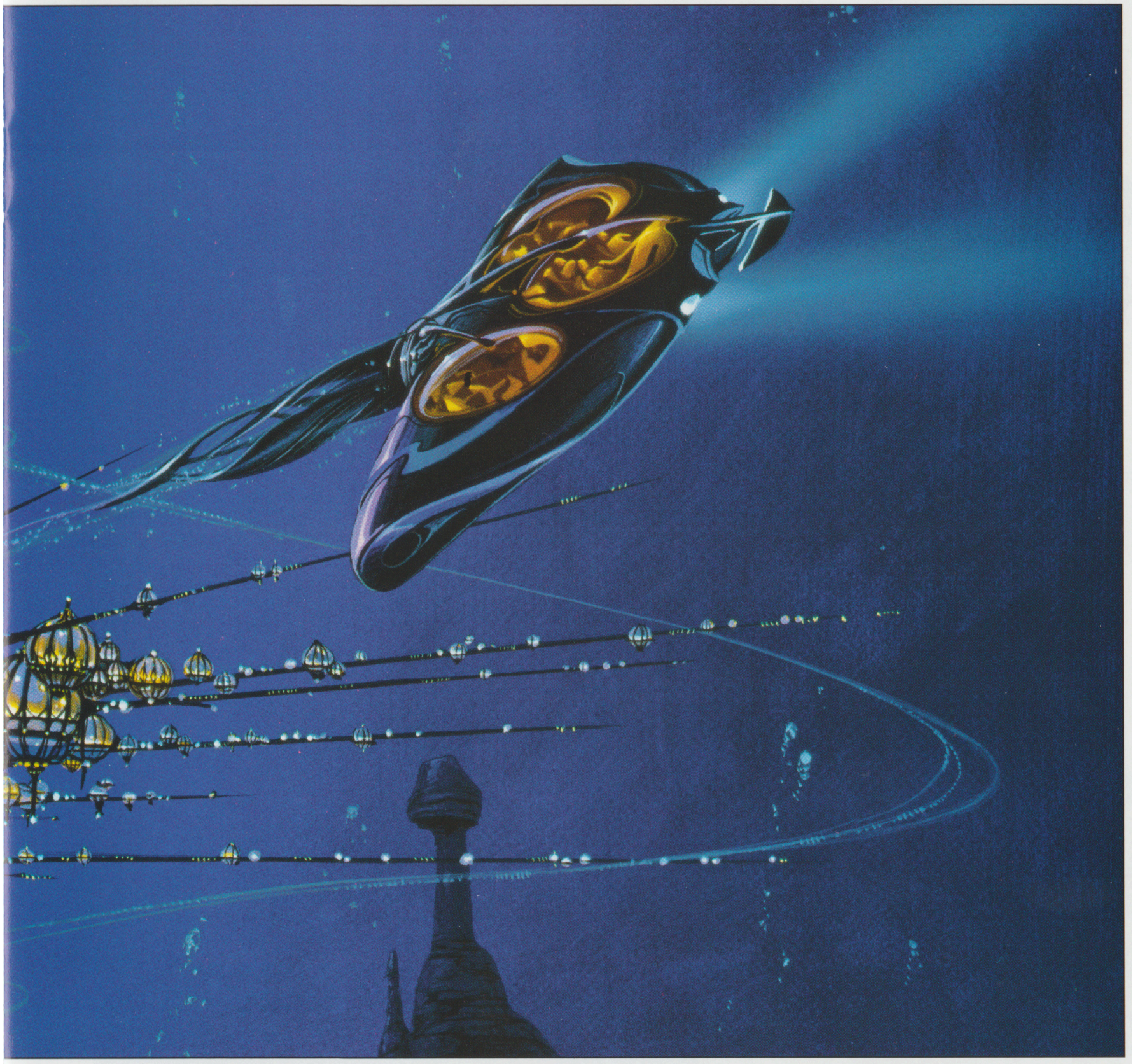
1

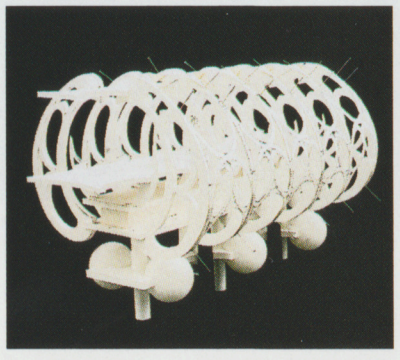
Otoh Gunga
1 Doug Chiang
2–4 Gavin Bocquet/production design department

Bongo submarine leaving the city, production painting (1)

The first vision of Otoh Gunga gave the impression of an underwater chandelier, complete with a school of kaadu swimming by.

Otoh Gunga council chambers, foam core conceptual models (2–4)





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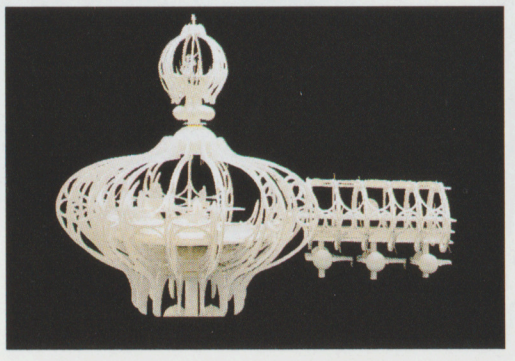

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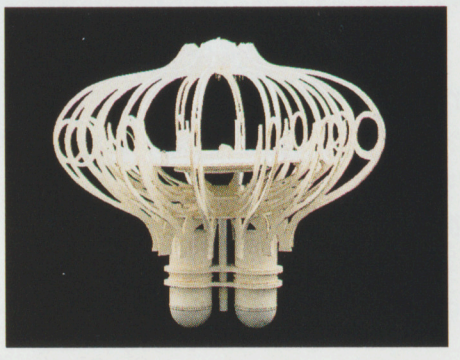

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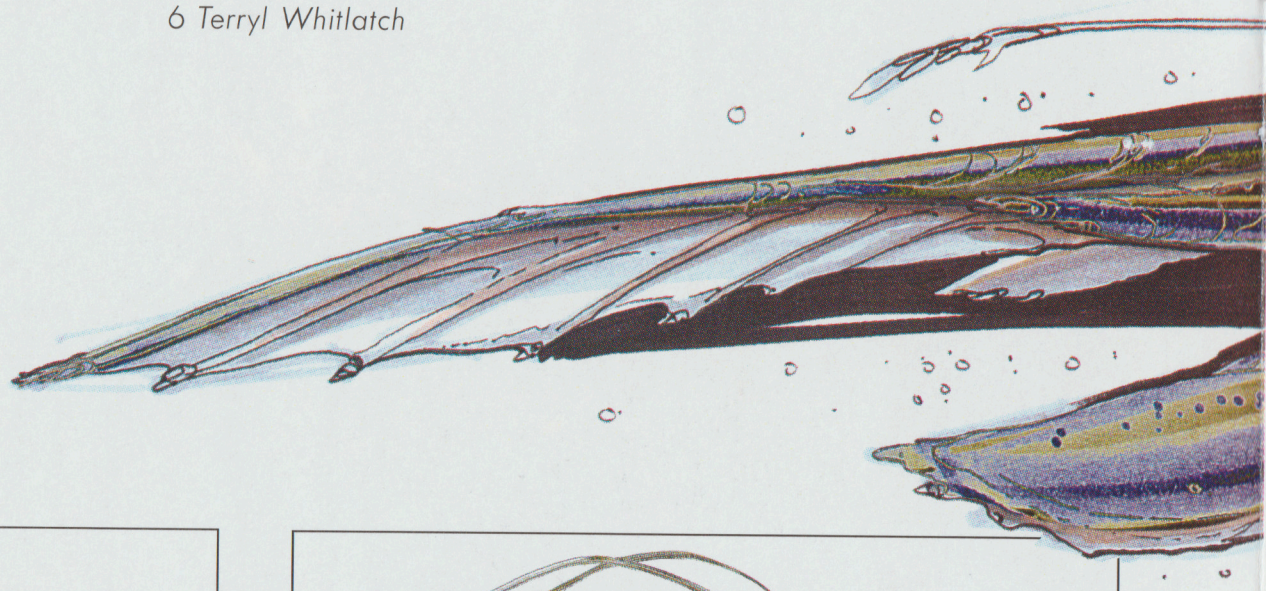
Opee *sea killer*
1–3, 5 Doug Chiang
4 Tony McVey
6 Terryl Whitlatch



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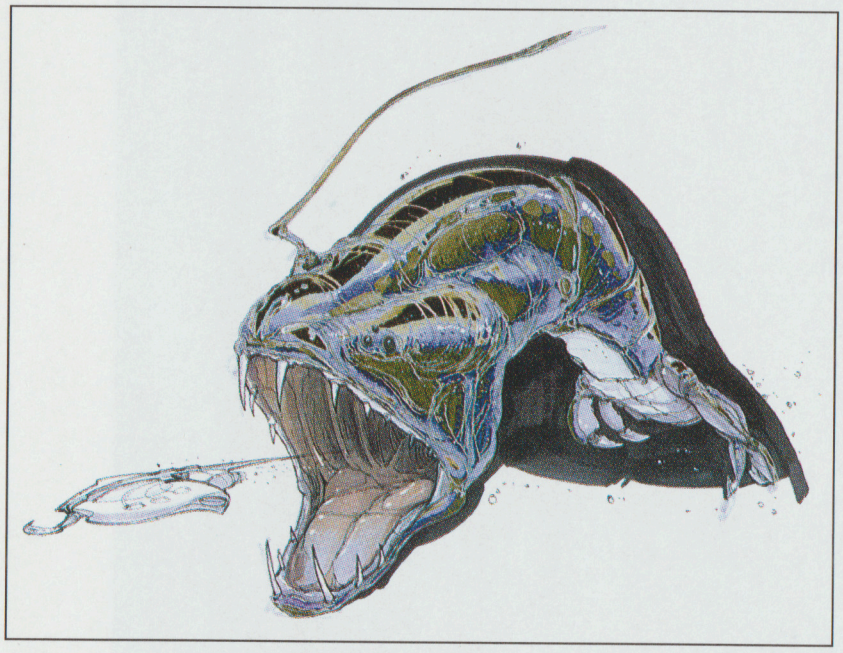

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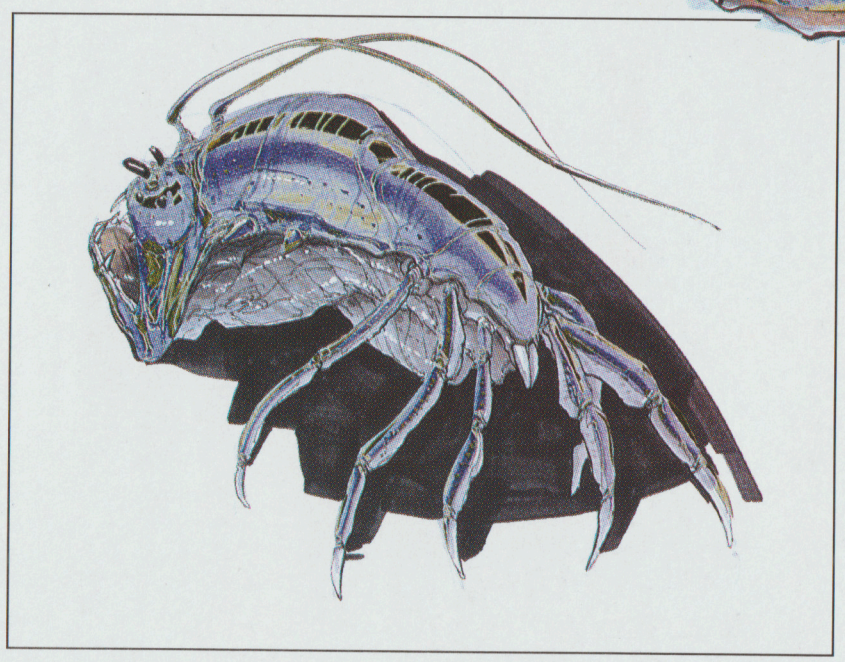

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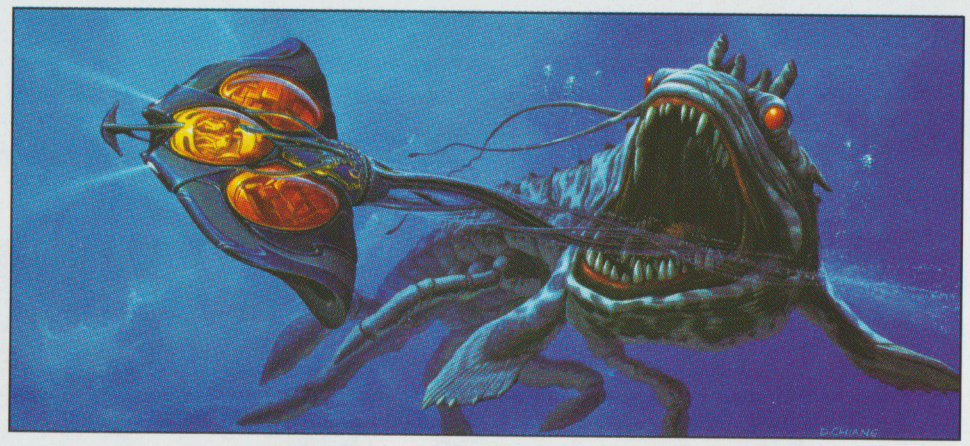
Conceptual designs:
At first, the opee sea killer was essentially a huge jaw grafted onto a fish/crab body (1). A second version (2) combined the traits of a crab with some mammalian characteristics, but ultimately, the opee became more of a cross between an anglerfish and a crab (3).

Sculpey concept maquette (4)

Opee sea killer pursuing the bongo, production painting (5)

Miscellaneous sea life, early conceptual designs (6)



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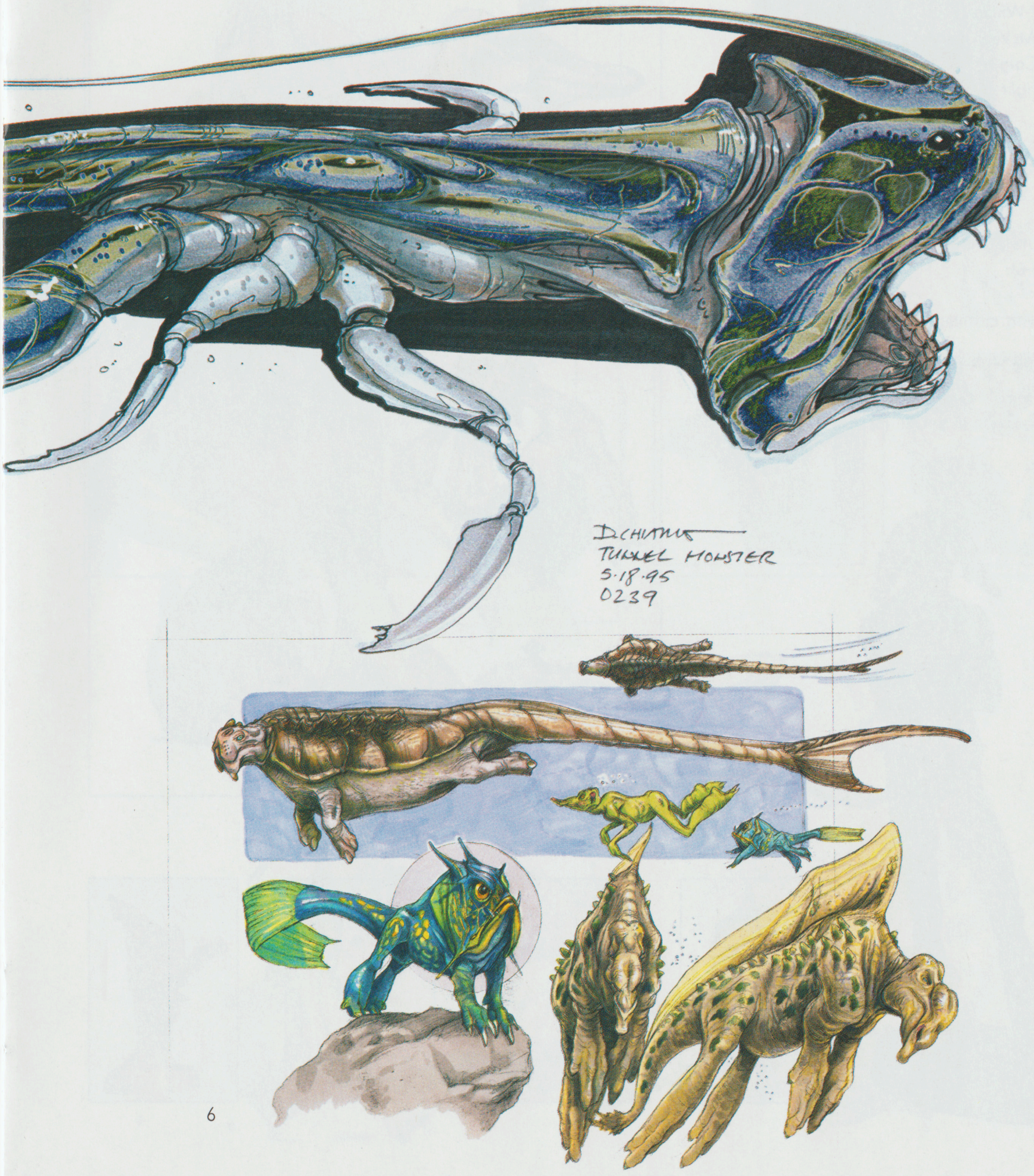

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Gungans/Jar Jar Binks
1, 9 Terryl Whitlatch
2–6 Tony McVey
7 Iain McCaig
8 Tony Wright

Intermediate conceptual designs and movement studies (1, 9)

Intermediate Sculpey and cast resin conceptual models (2–6)

Gungan with clothing, intermediate conceptual design (7)

Male and female Gungans and skin texture, intermediate conceptual design (8)

1

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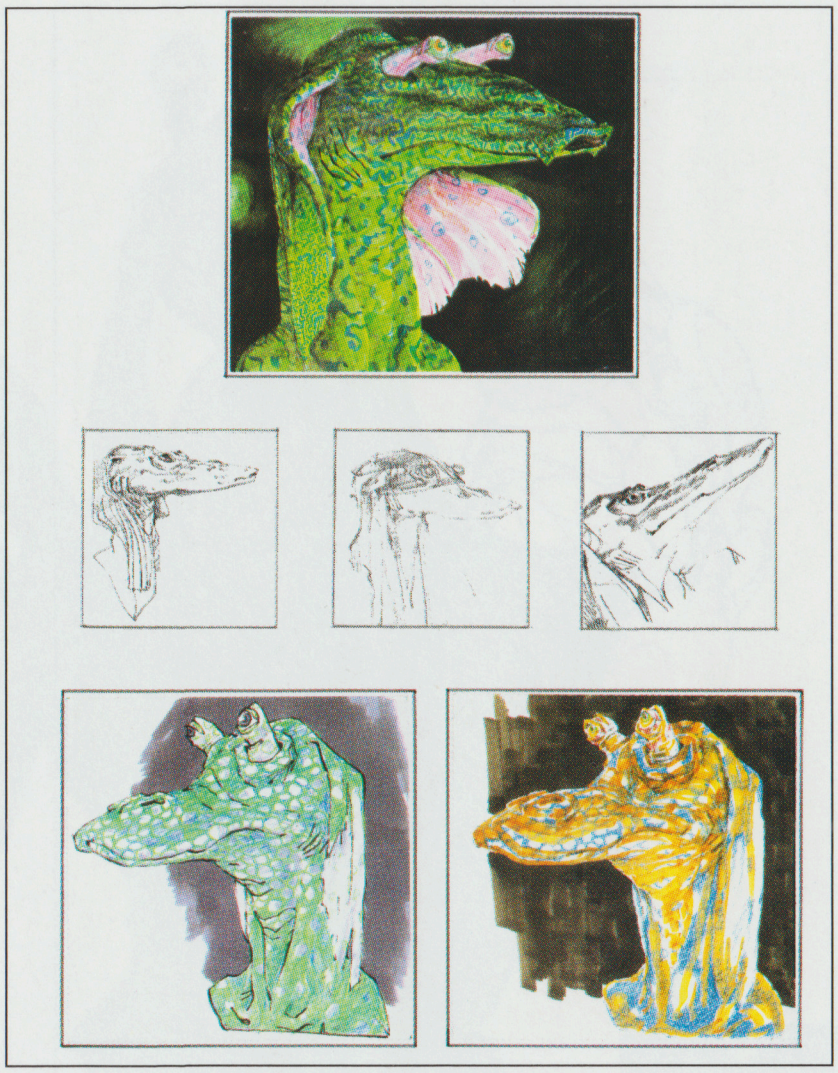

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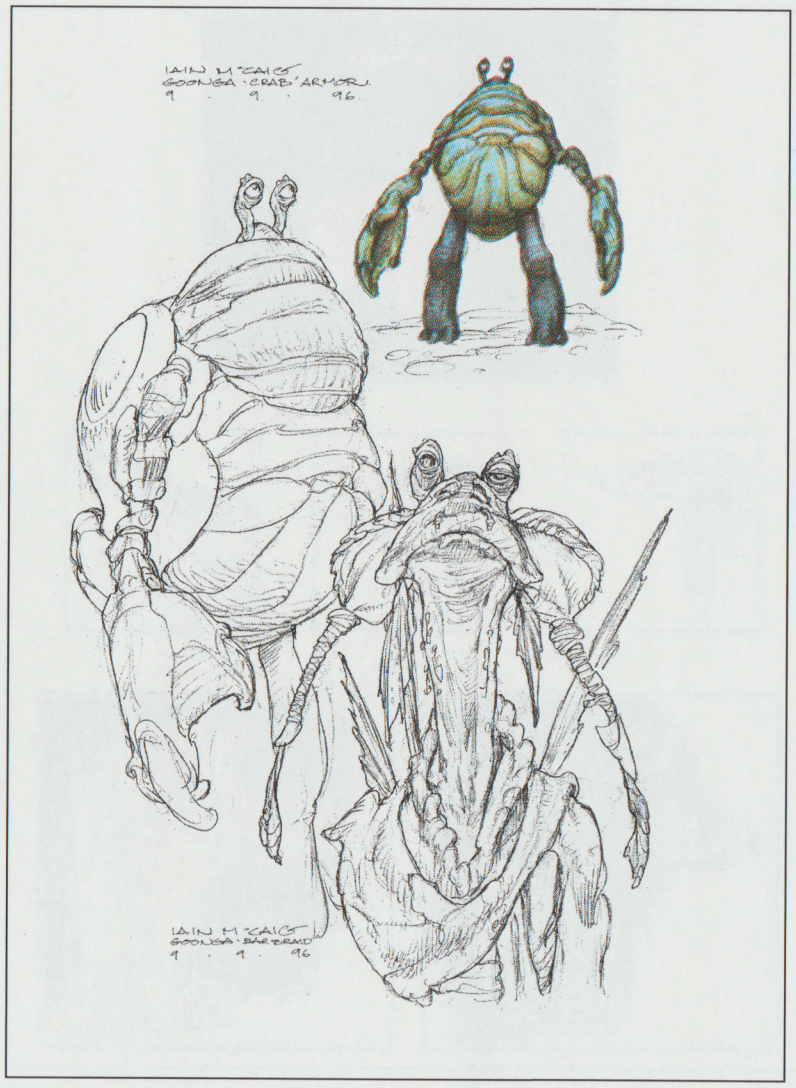

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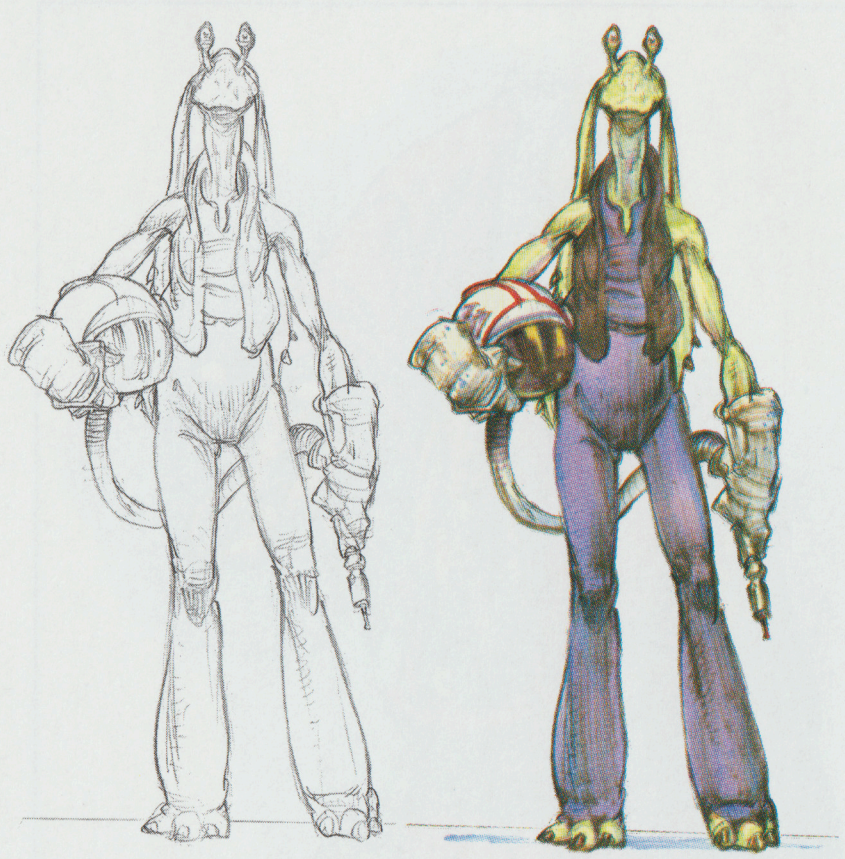

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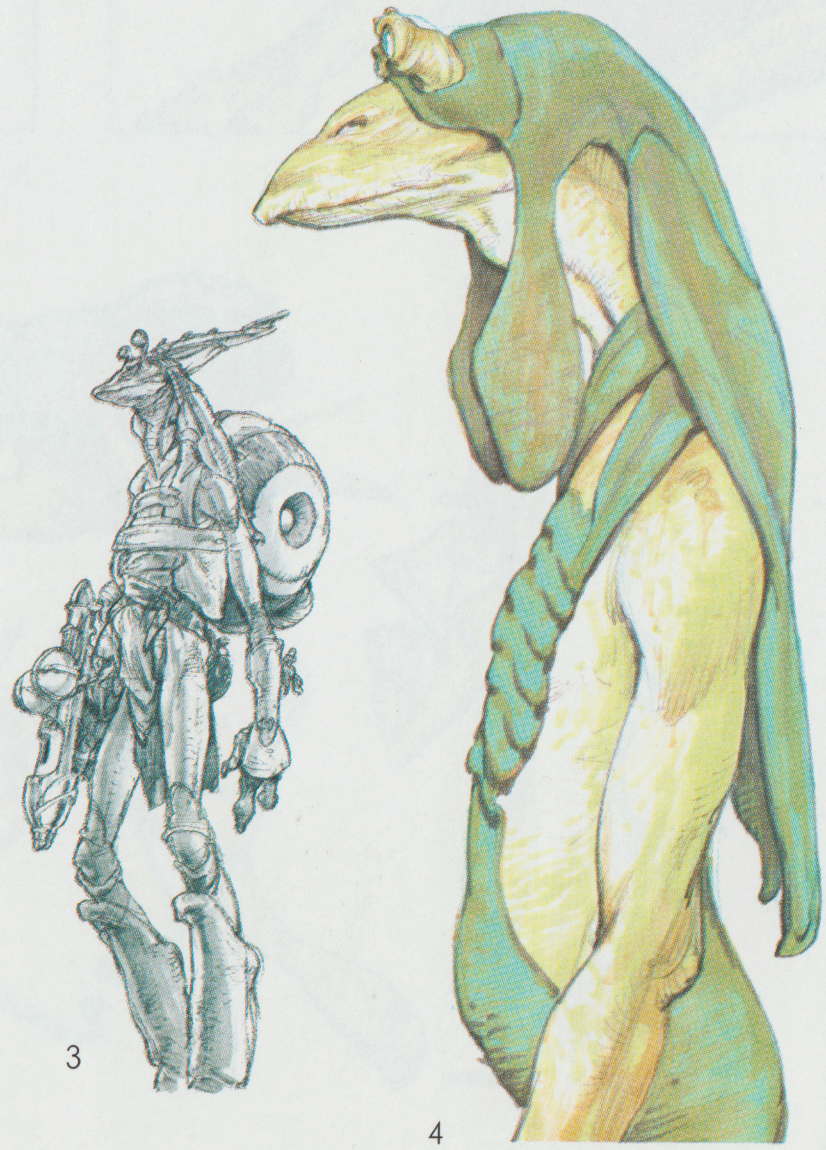

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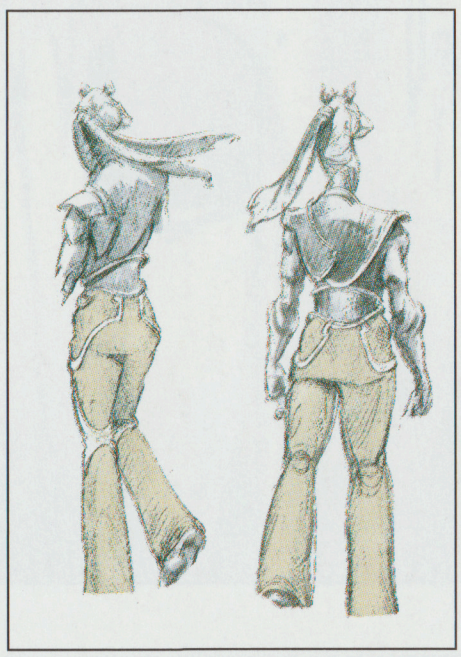
4

Gungan armor, conceptual designs
1–5, 8 Iain McCaig
6, 7 Edwin Natividad

For a short period of time, crab-shell armor was considered for the Gungans (1). Ultimately, however, leather became the material of choice (6, 7), not only because the Gungans are a "primitive" species, but also because it is easier to animate. By dressing the Gungans in tight-fitting leather and metal, the digital artists didn't have to animate the shifting and creasing that is characteristic of lighter materials.

5



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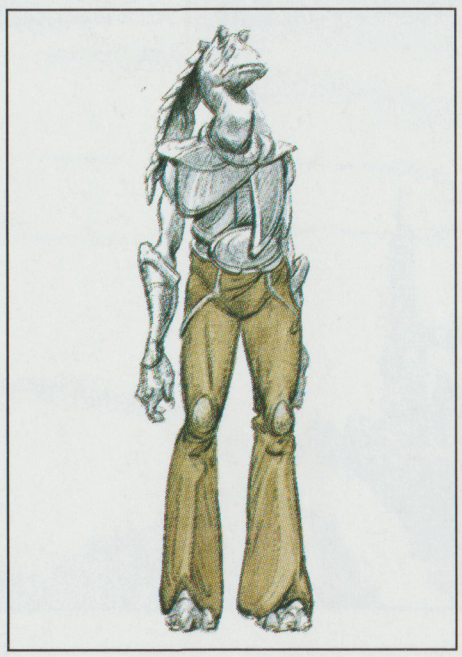

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IAIN M. CAIG.
GOONGA ARMOR
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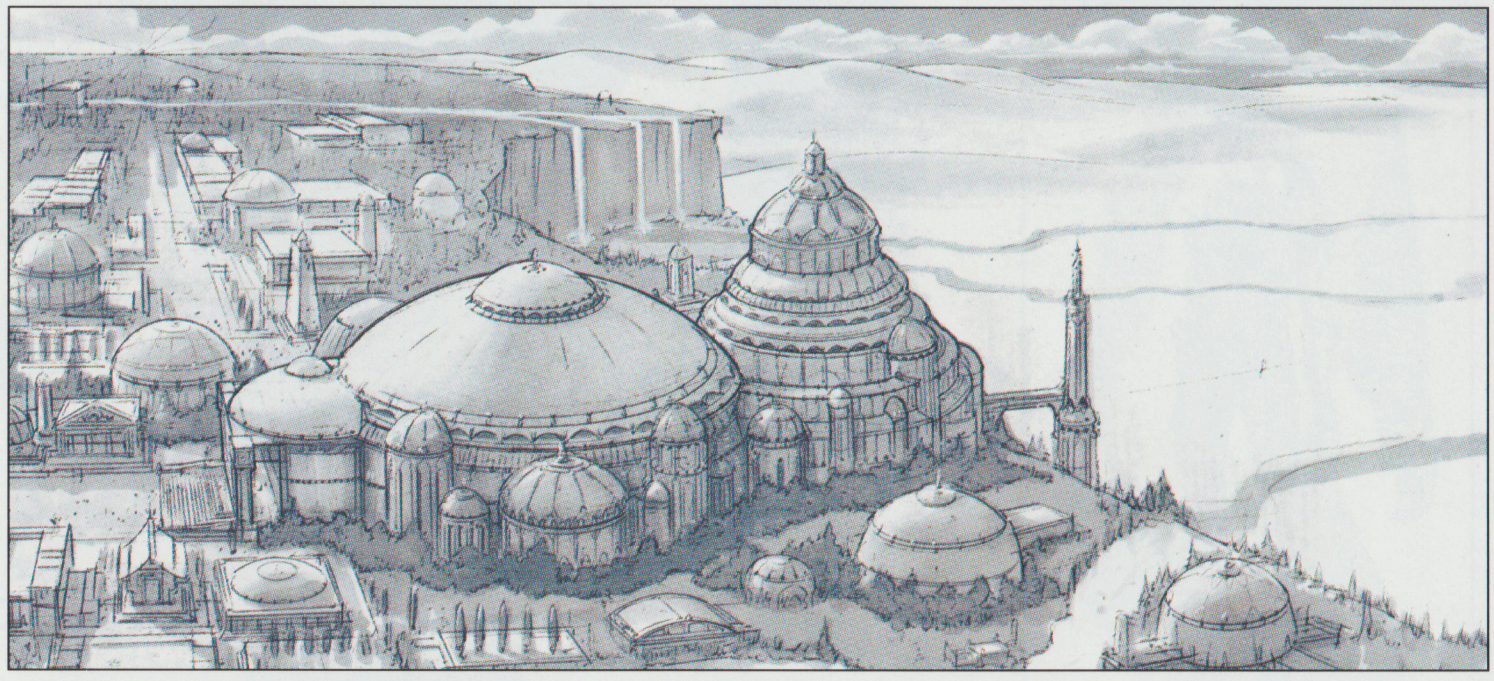

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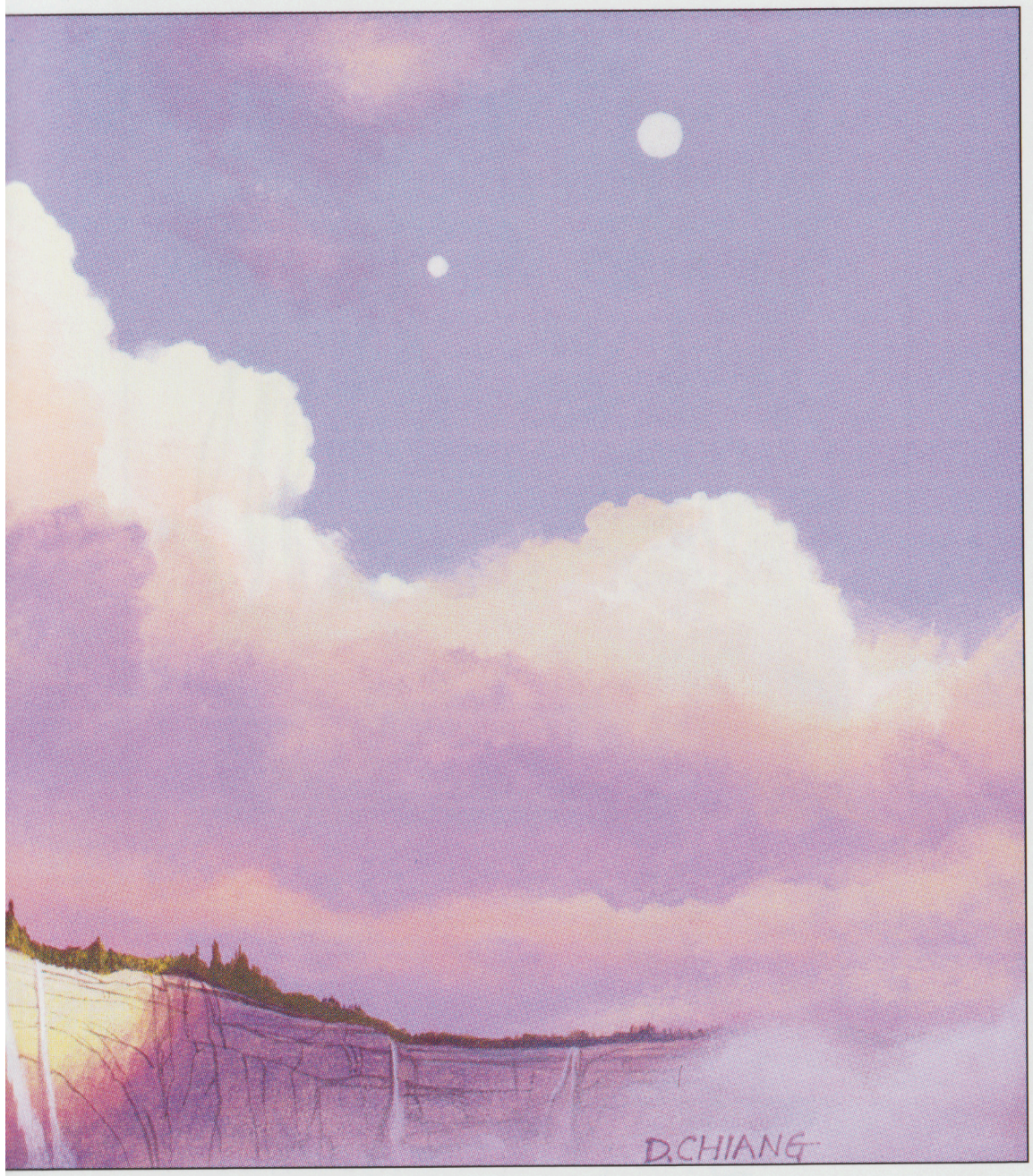


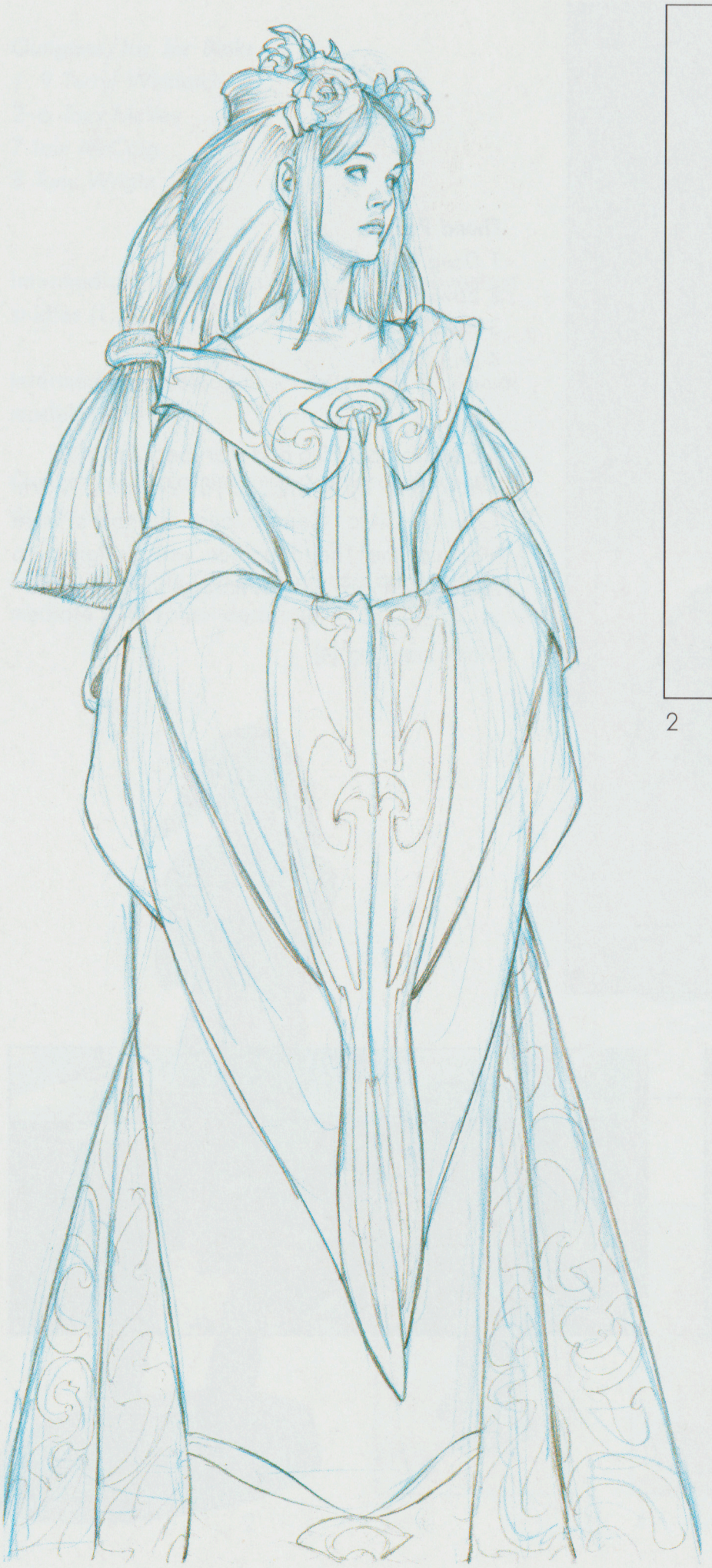
Theed Palace
1 Doug Chiang
2 Edwin Natividad
3 Jay Shuster
4 Brian Flora

Production painting and storyboards (1–3): Influenced by Frank Lloyd Wright's Marin County Civic Center and Istanbul's Blue Mosque, the Theed palace was designed to exist in harmony with its natural surroundings.

Matte painting (4)

3

4



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4

Padmé/handmaiden hair and costume, conceptual designs
1–7 Iain McCaig

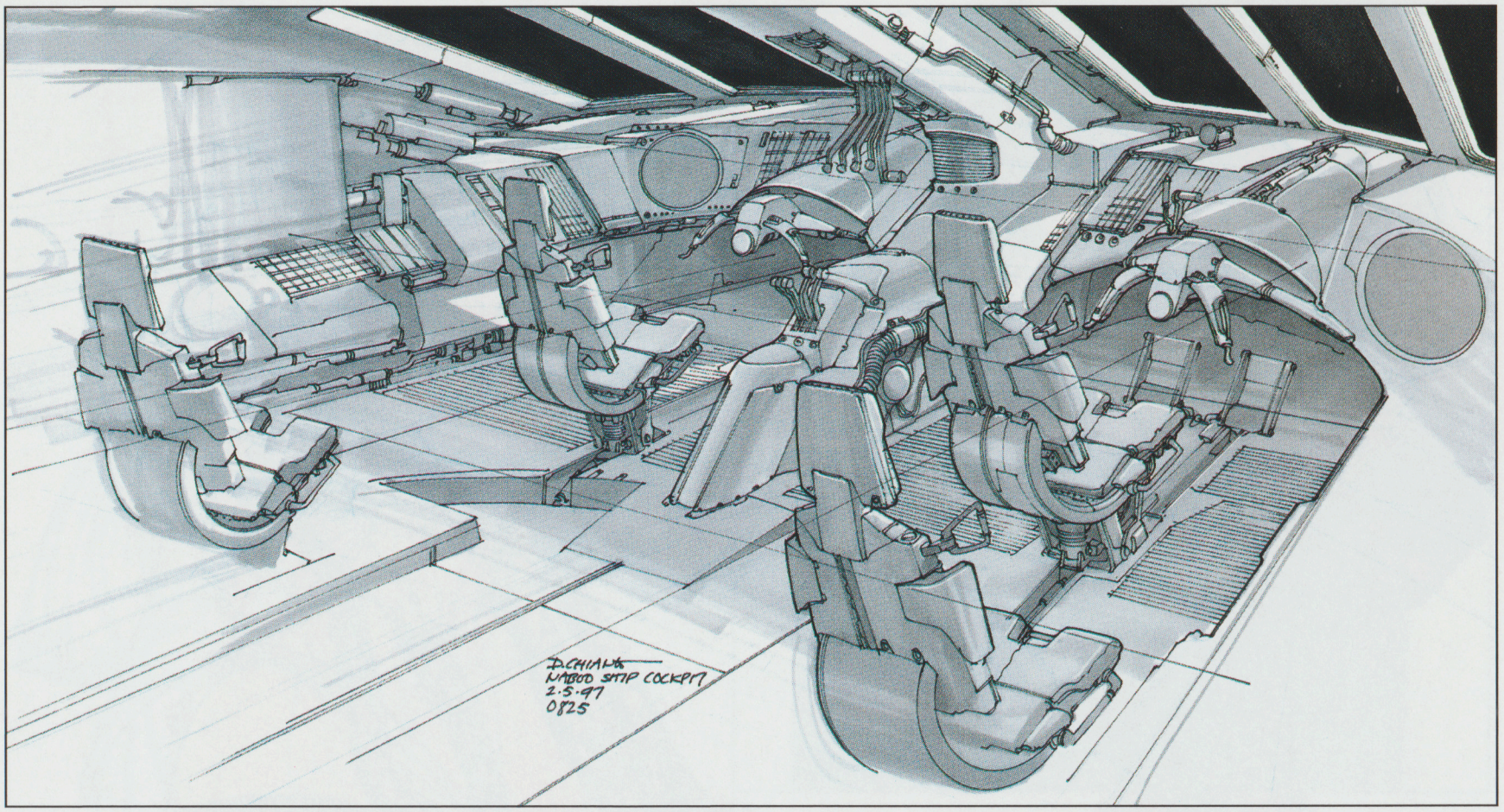
While Amidala wore her hair up, with heavy head ornaments, McCaig gave the handmaidens a lighter look. Their hairstyles (1) were less elaborate and had a more Pre-Raphaelite/art nouveau flavor.

Since Naboo costumes had an element of disguise to them, particularly in the case of the Queen, McCaig tried to design clothing that would obscure any hints of size, shape, or age (1, 3, 4, 7).

5

6

7



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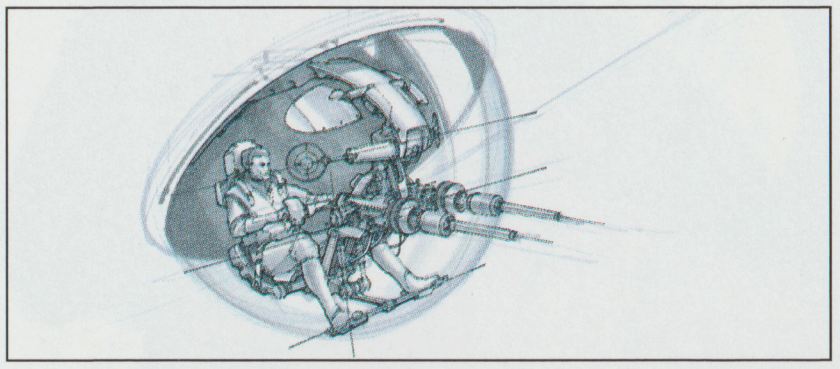

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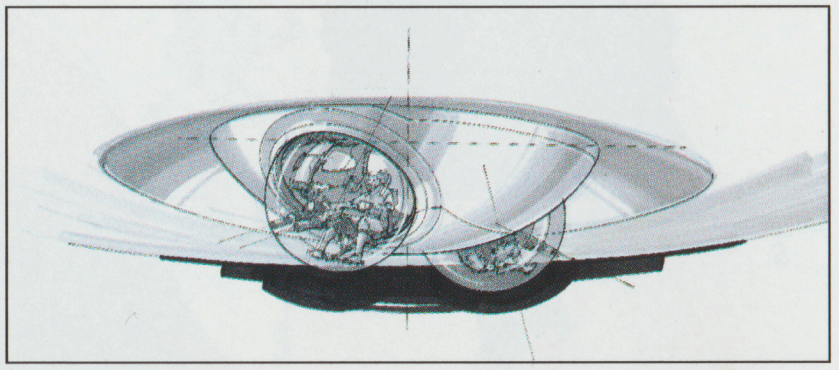

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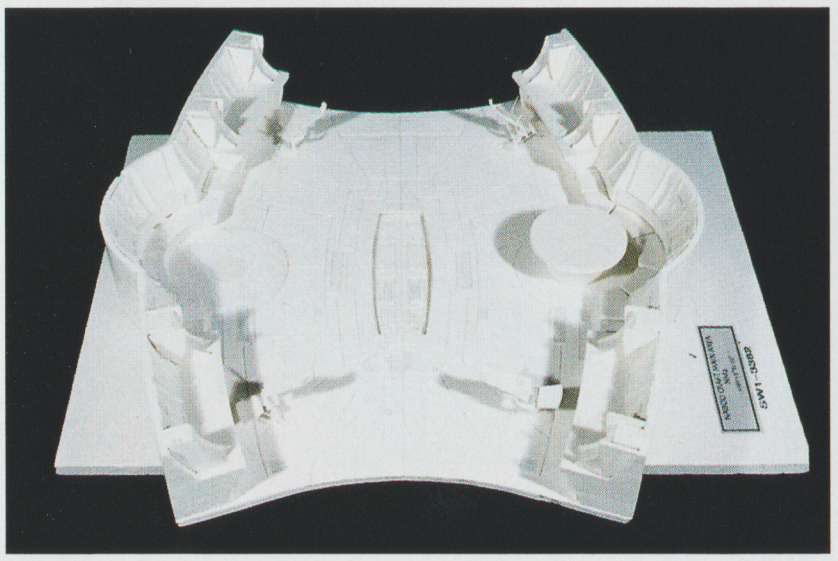

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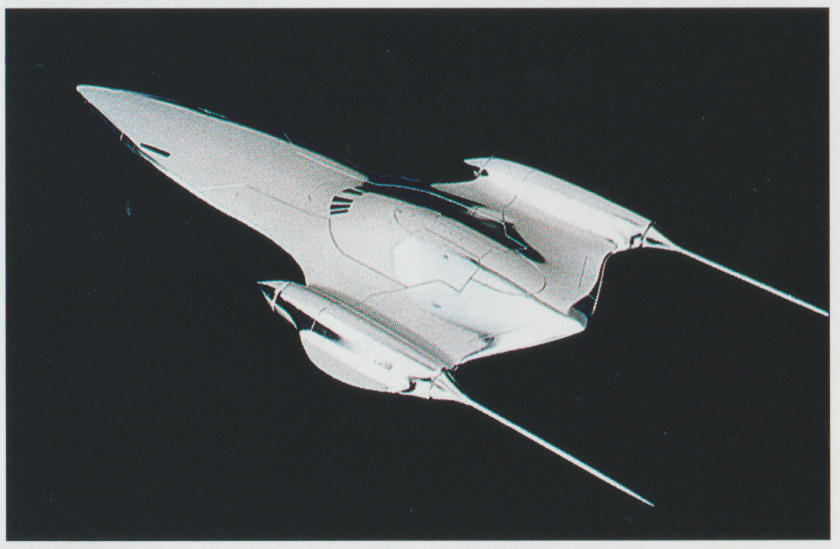

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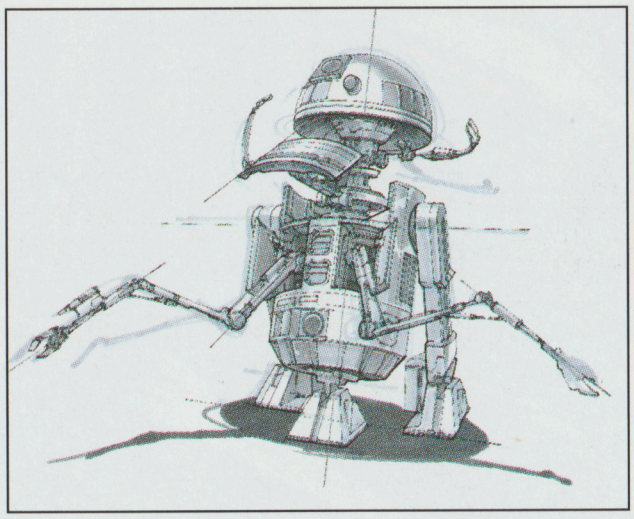

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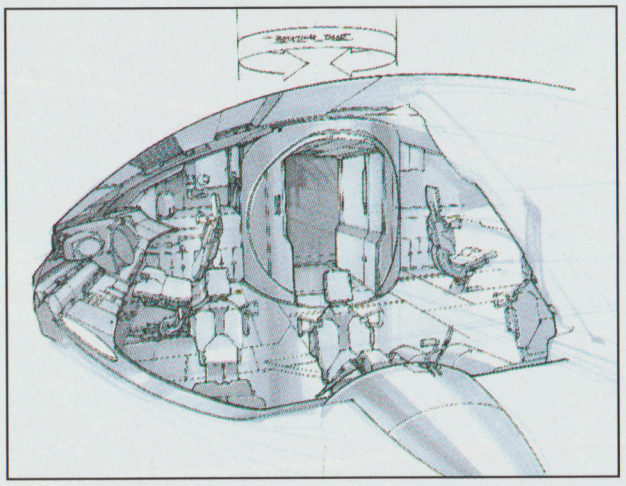

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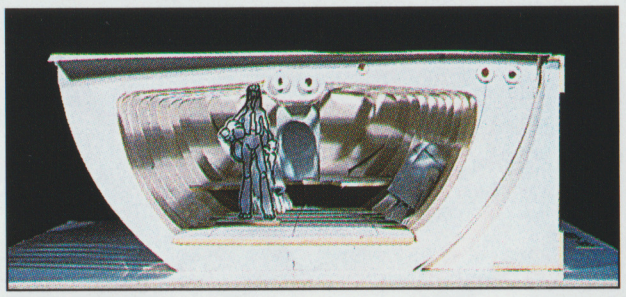

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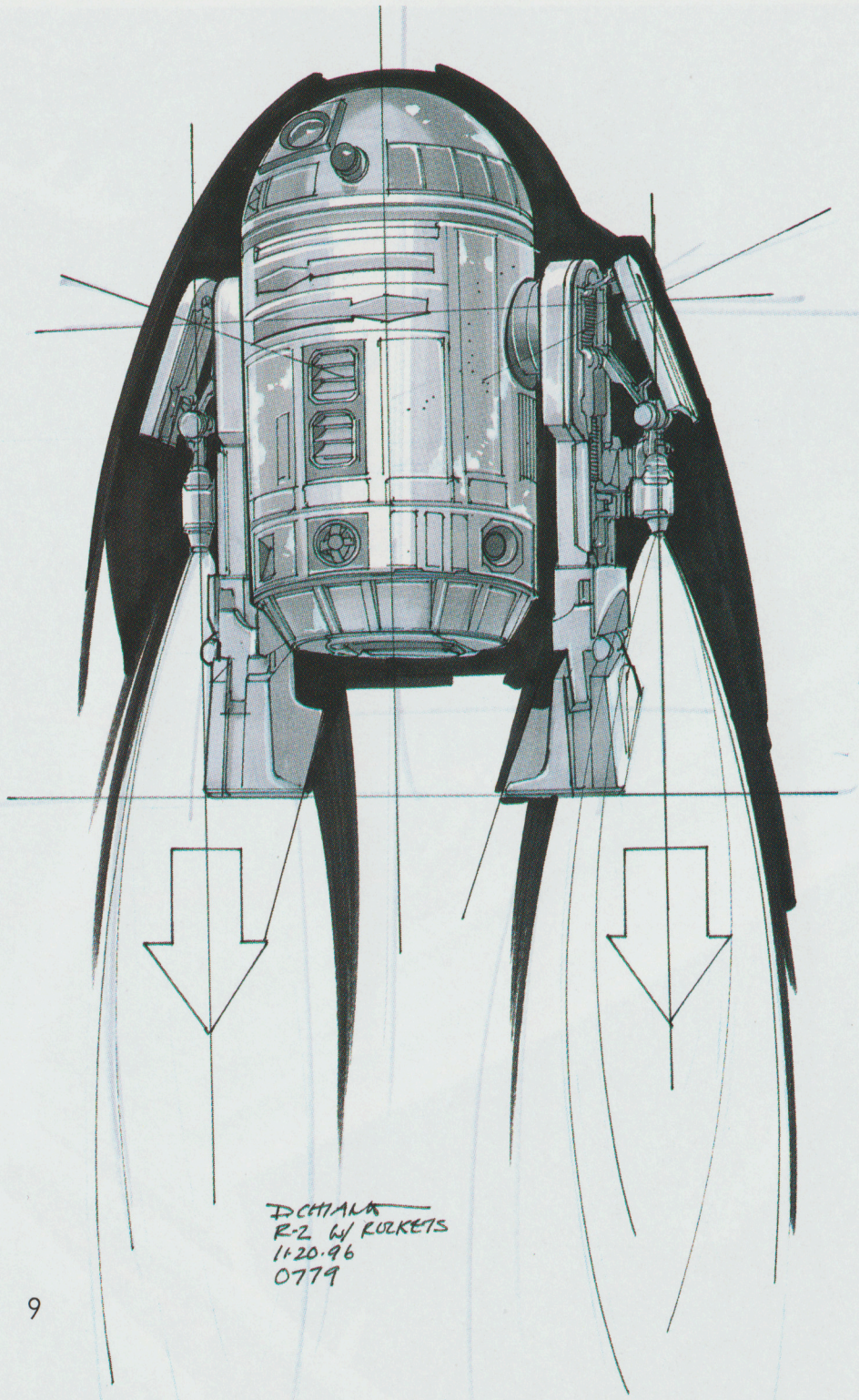


9

Queen Amidala's J-type 327 Nubian starship
1–3, 6, 7, 9 Doug Chiang
4, 8 Gavin Bocquet/production design team
5 John Goodson

Cockpit interiors, conceptual designs (1, 7)

Gunner turrets, conceptual designs (2, 3):
At one point, the Queen's ship was to be armed and Qui-Gon and Obi-Wan were to use these turrets to fight off the starfighter droids. These were eliminated when Lucas decided to make the Queen's vessel a ship of peace.

Main hold and droid hold, conceptual card models (4, 8)
Conceptual model (5)

R2-D2, conceptual designs:
Lucas wanted R2-D2 to be able to do more in this film, so here we see Artoo in full-exploded capacity, with arms out and head raised (6). Artoo was also to be outfitted with rockets so that he could fly over obstacles (9).

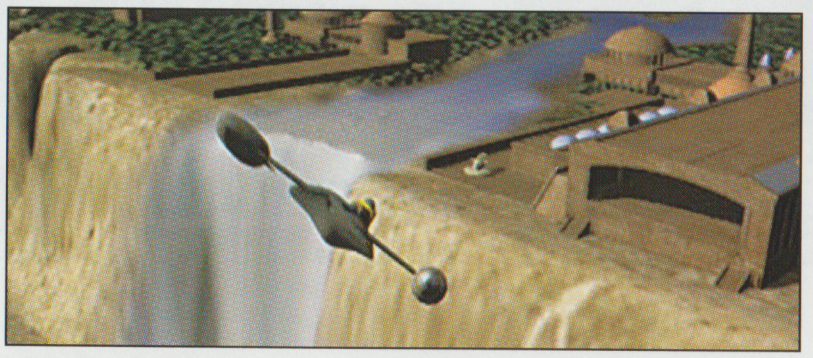
1

The N-1 Starfighter in action
1 Doug Chiang
2 Kevin Baillie

In an early rendition of the space battle (1), the since-deleted missile launcher is still on top of the N-1, and the Trade Federation starfighters are still saucer-shaped and droid-piloted. Also, the bridge of the Trade Federation battleship is back by the engines instead of being in the ball.

An N-1 streaks out of the Theed hangar. Animatic frame (2)

2



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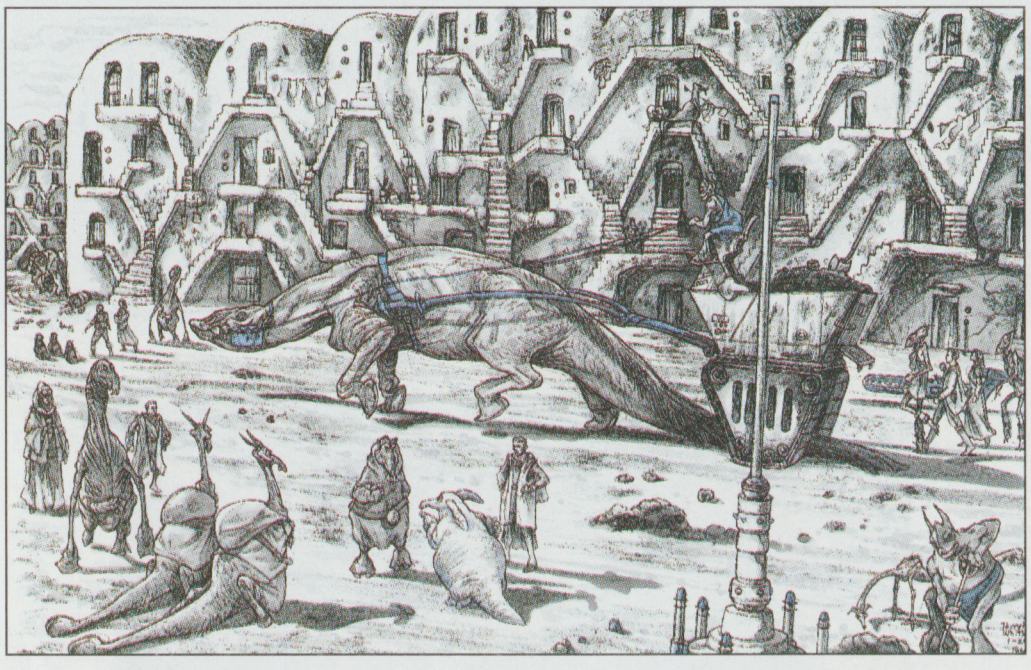

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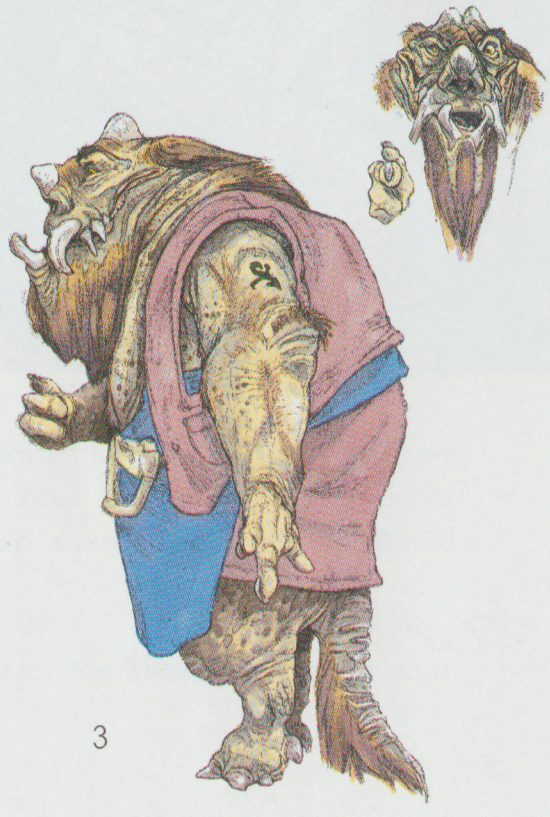

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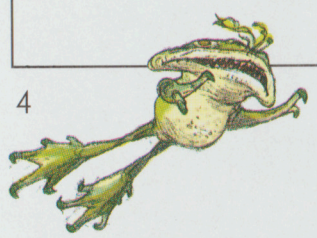

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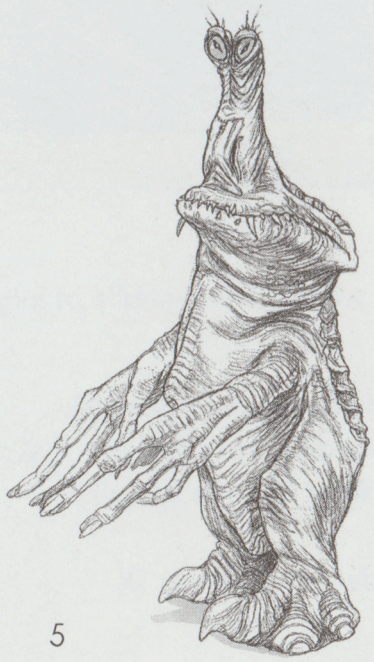


5

6

Mos Espa

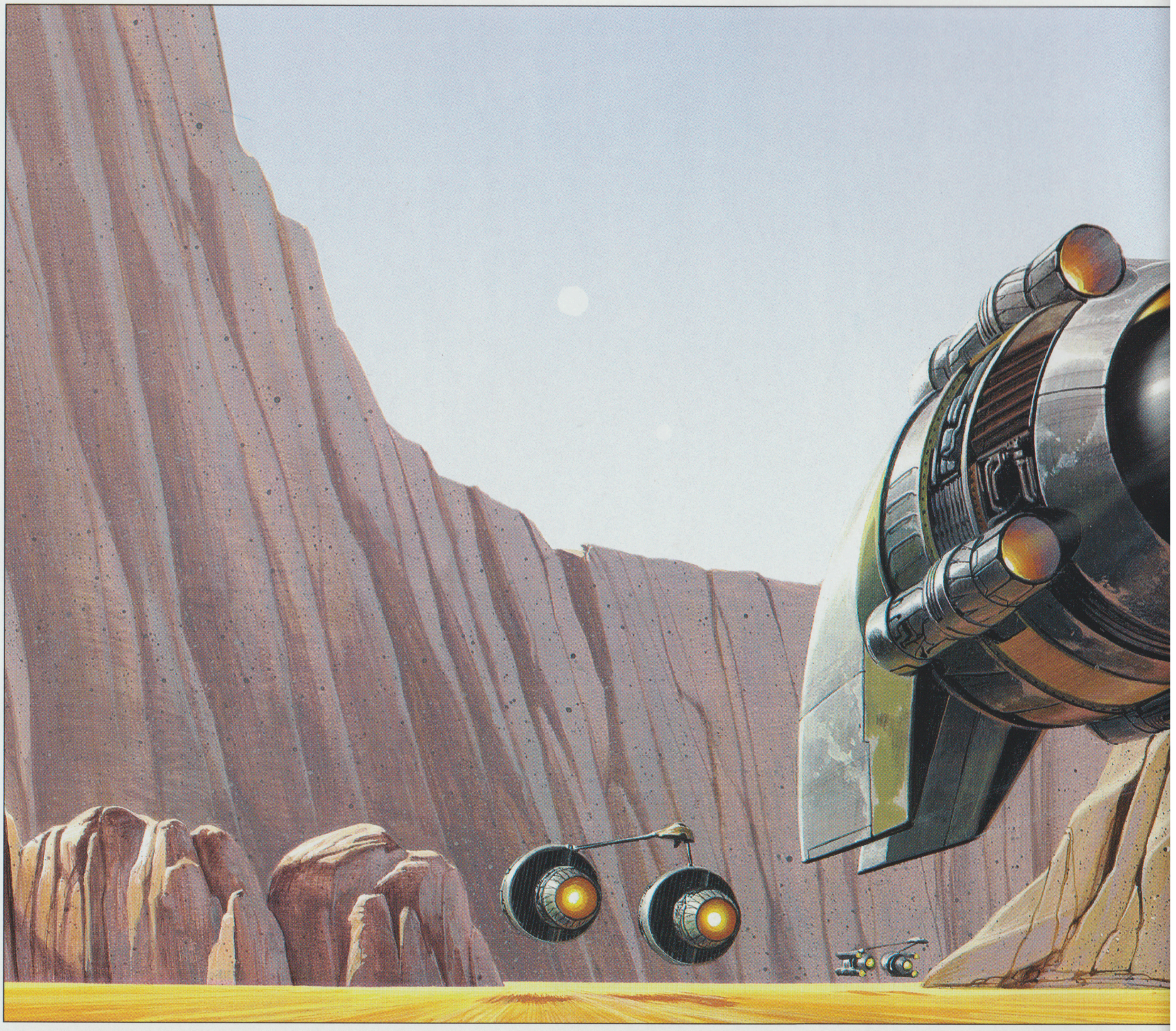
1–6 Terryl Whitlatch

The crowded, bustling tenements (1, 2) where slaves such as Anakin Skywalker would live.

Thugs, conceptual designs:
This first bruiser is based on a rowdy member of the Hell's Angels (3), while the second one (6) can also be found in the *Star Wars: A New Hope: Special Edition* cantina scene.

Frog seller's booth, conceptual design (4)

Frog alien, conceptual design (5):
Although this fellow looks a bit like an early Gungan sketch, he was actually a separate creation, meant for the street vendors of Tatooine.



1

Podracers

1, 3 Doug Chiang

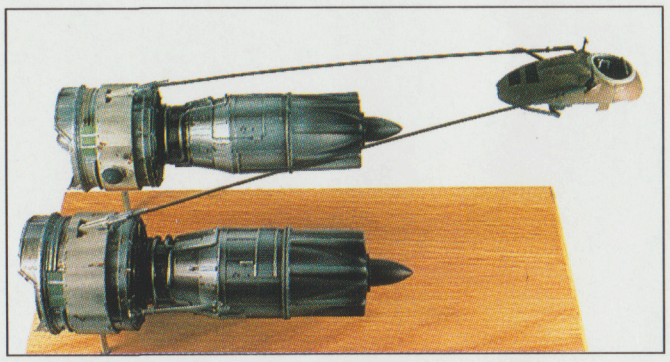
2 John Goodson

This digitally-altered production painting of the Podrace (1) was originally cropped in to just above the engines. Lucas saw it and decided that the cockpit should be included in the frame. Chiang used a computer to revise the painting accordingly and to add motion blur—something that would have been very hard to do without the benefit of digital technology.

Early styrene, brass, and wood conceptual model (2): This cockpit, originally intended for Anakin, became Gasgano's, while the engines went to Ratts Tyerell.

Anakin's Podracer, digital production painting (3).

2



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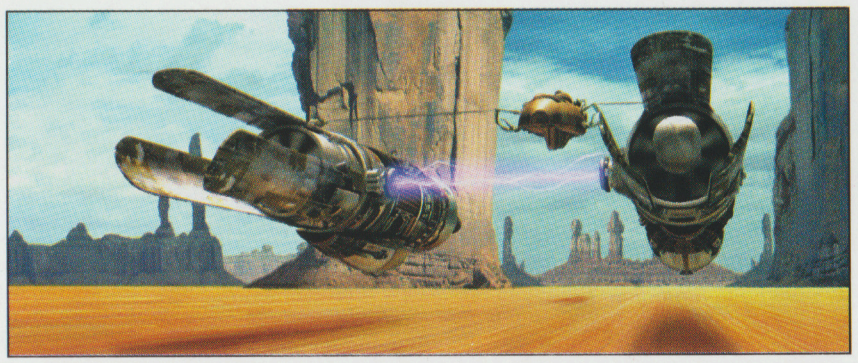
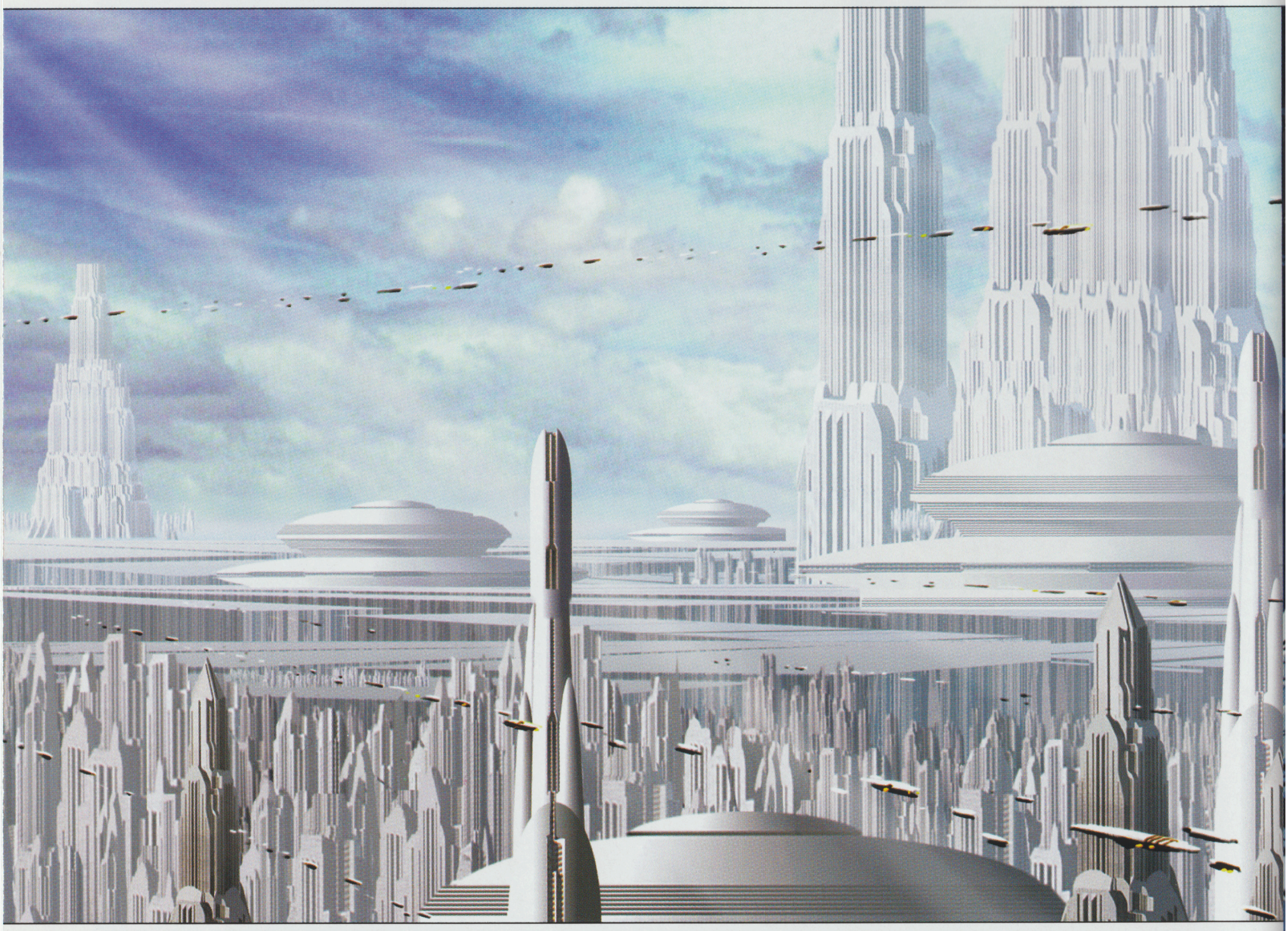
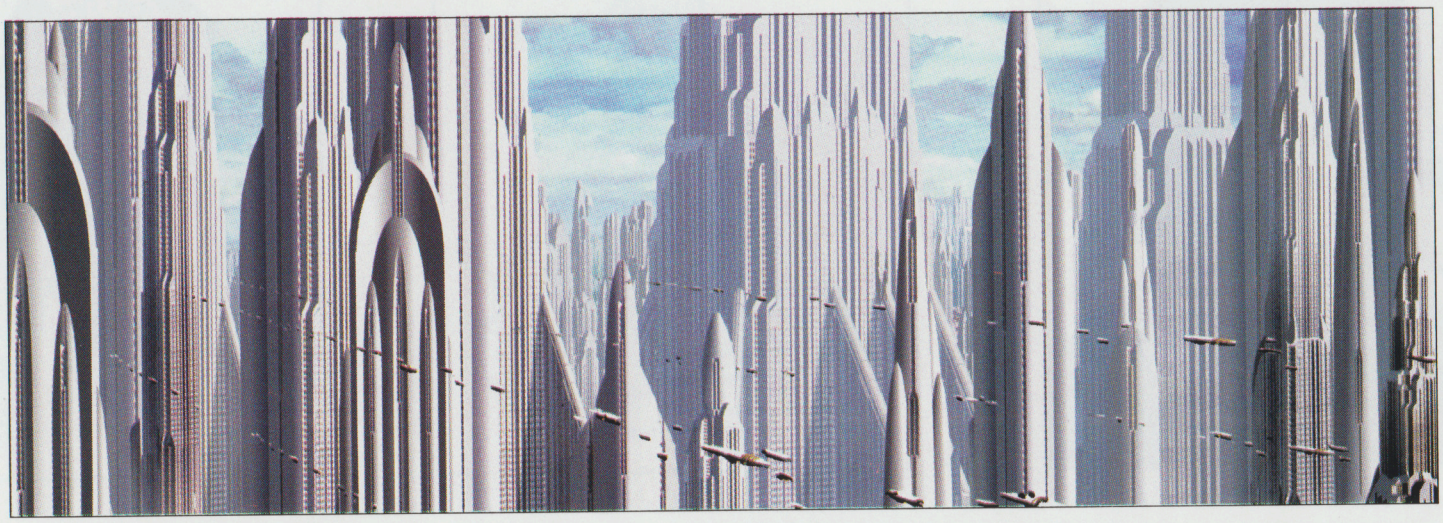


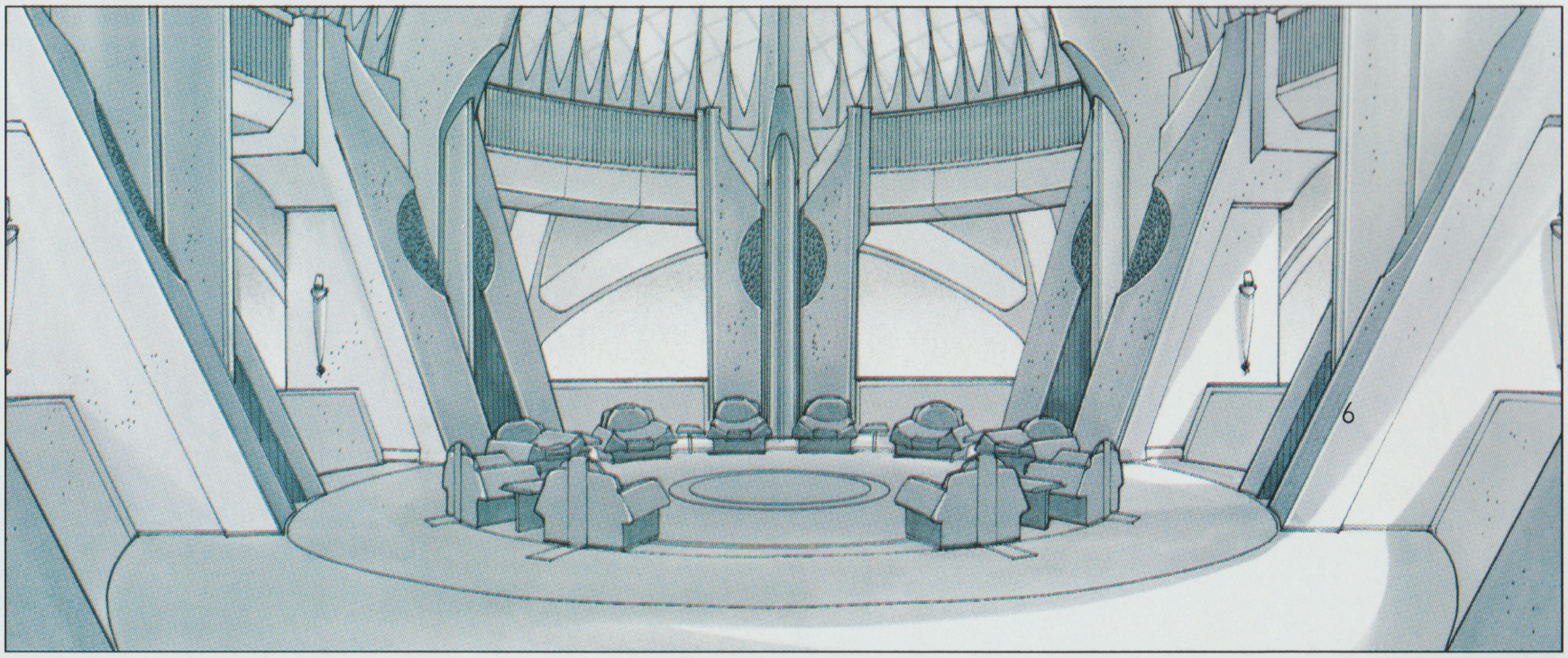


1

Coruscant cityscapes: the Galactic Senate's neighborhood, digital conceptual paintings
1, 2 Doug Chiang

2

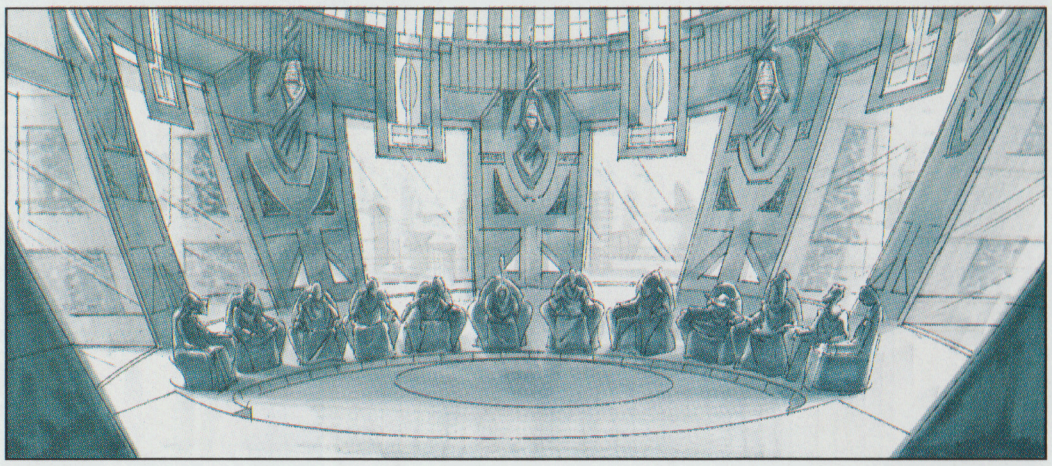




1

Jedi Council Chamber, conceptual designs
1 Doug Chiang
2 Edwin Natividad

Since the exterior of the Jedi Temple, with its spikes and spires, was designed first, the interior had to fit within certain constraints. Thus different variations within a certain geometry were tried (1, 2). As for the feel of the room, Lucas had described it as a "gentleman's club, where important people sit in big, comfortable chairs and discuss important matters."



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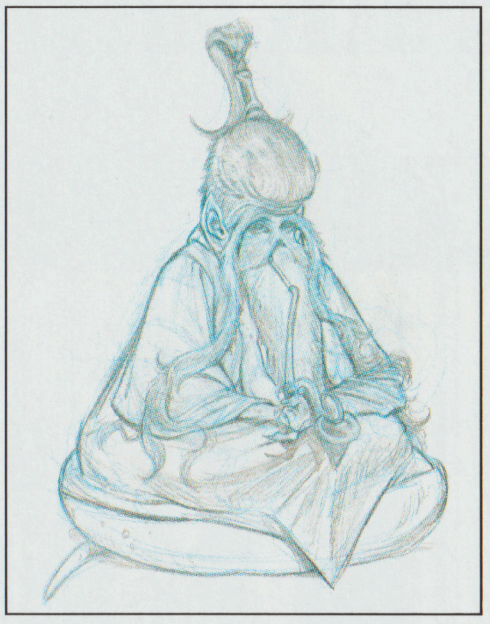

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8

Jedi Council Members, conceptual designs
3, 5, 6–8 Iain McCaig
4 Benton Jew

Mace Windu:
Iain McCaig commented, "This initial design [for Mace Windu] is based on ILM modeler Steve Aplin's face; Samuel L. Jackson had yet to be cast (3). The costume is the product of scribbling. People ask how I know when to stop scribbling, and decide a work is finished. I say you have to go too far and destroy it, because then you know when you should have stopped and can go back. If you don't, you leave untold riches out there."

Oppo Rancisis:
Benton Jew based this character (4) on a picture of an old man from a Chinese calendar hanging in his grandparents' house.

Eeth Koth:
McCaig had thought that Eeth Koth, not Mace Windu, would be the leader of the Jedi, and based this portrait on design director Doug Chiang (5).

Yoda:
Since the Jedi were the Republic's law enforcers, McCaig thought it appropriate to dress them in black, like policemen. He also thought it gave the diminutive Yoda a more powerful look (6).

Young Yoda/Yaddle:
This sketch was originally meant to be Yoda as a young child (7). When McCaig drew it he had just read about an eight-year-old Tibetan boy who carried his two-year-old brother twenty-five miles in order to escape the invading Chinese. Feeling that Yoda would have done that, McCaig gave him a look that conveyed not just youth, but also pain and wisdom. Ultimately, however, this sketch was used to create Yaddle, a female member of Yoda's species.

Ki-Adi-Mundi and alien Jedi:
When Lucas instructed him to create alien Jedi, McCaig took it as an opportunity to draw bizarre parodies of Obi-Wan Kenobi, such as Ki-Adi-Mundi (8), who is Obi-Wan crossed with a whale.

2

1

3

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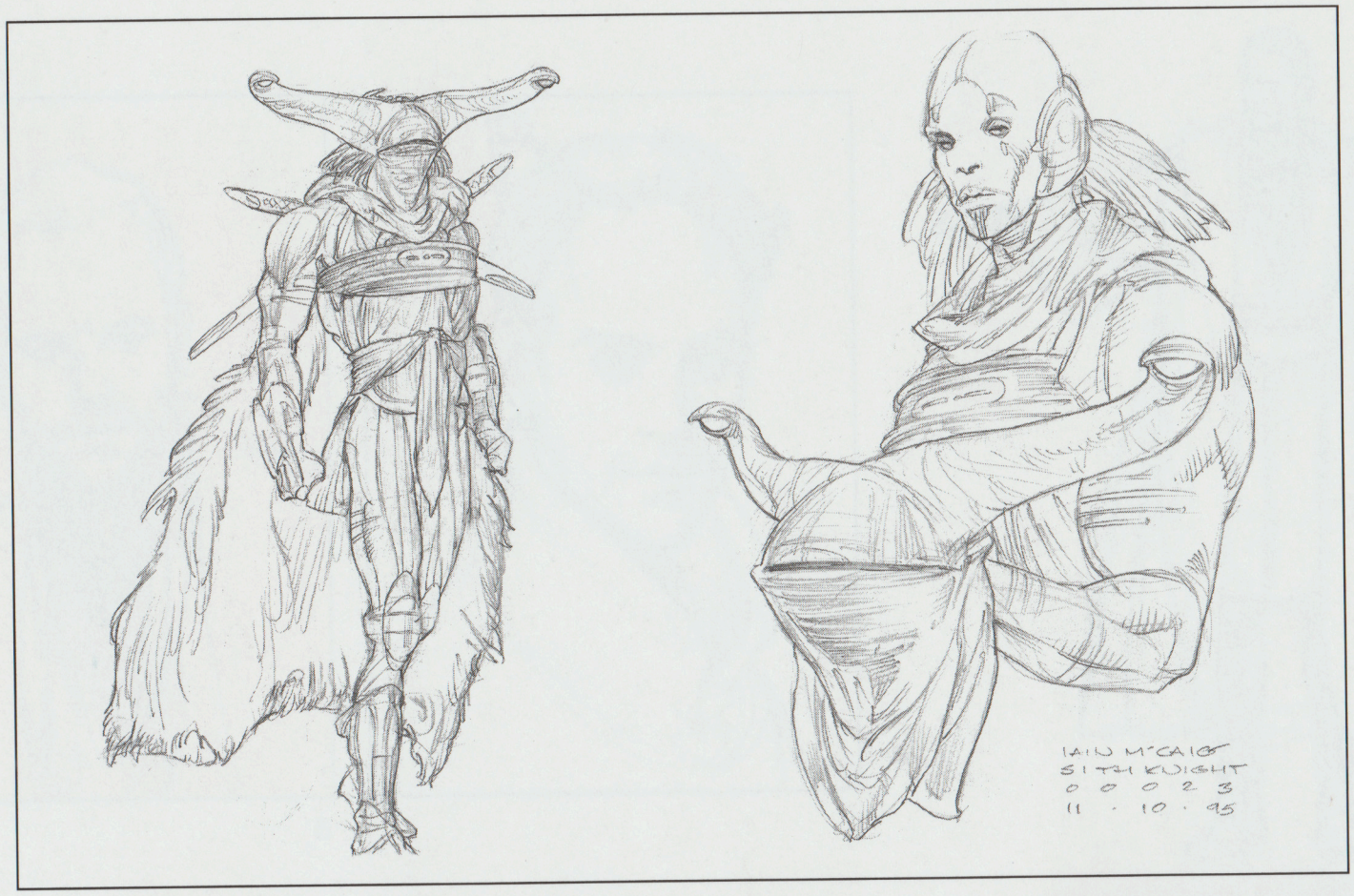
5



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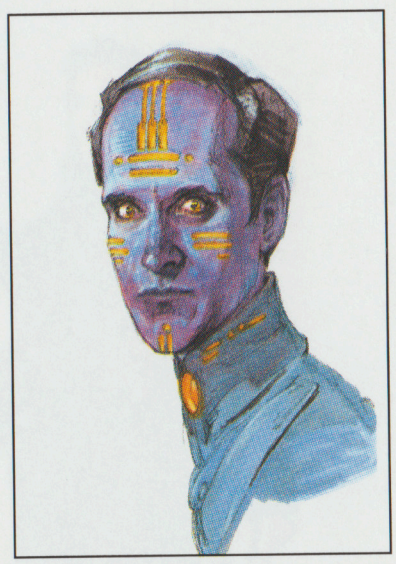

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9

Sith Lords, conceptual designs
1–9 Iain McCaig

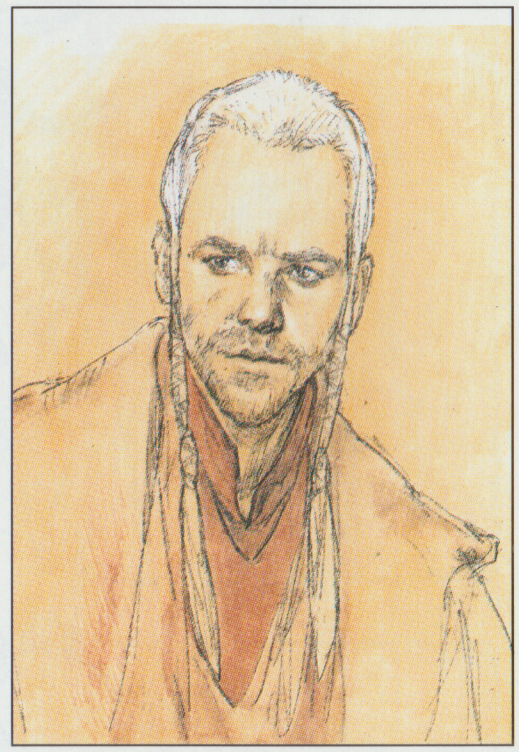
Before Lucas nailed down the character of Darth Maul, he instructed Iain McCaig to brainstorm what a Sith Lord might look like. At first McCaig gave them large, organic-looking cloaks and bizarre, crusader-influenced helmets (4–6). He also tried a few female versions, for which Lucas instructed him to draw his worst nightmare. The first "Sith Witch" (1) was so terrifying that Lucas asked McCaig to back off a bit and just draw his "second worst nightmare" (2).

Darth Sidious (3), meanwhile, was much simpler. McCaig took the Emperor from *Return of the Jedi*, made him younger, and, for a twist, put him in a white robe instead of a black one.

Simultaneously, McCaig was also creating "evil senators," and began experimenting with facial tattoos and scars (7–9), leading to the creation of Darth Maul. (The senators' likenesses were based on previsualization /effects supervisor David Dozoretz, photographer Greg Gawlowski, and production designer Gavin Bocquet.)

1

2



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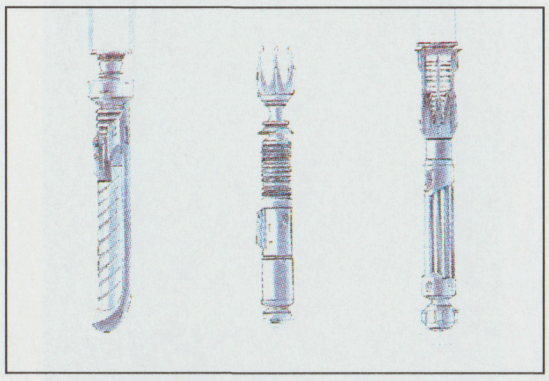

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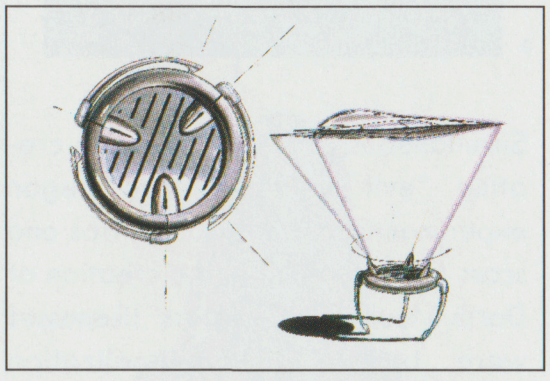

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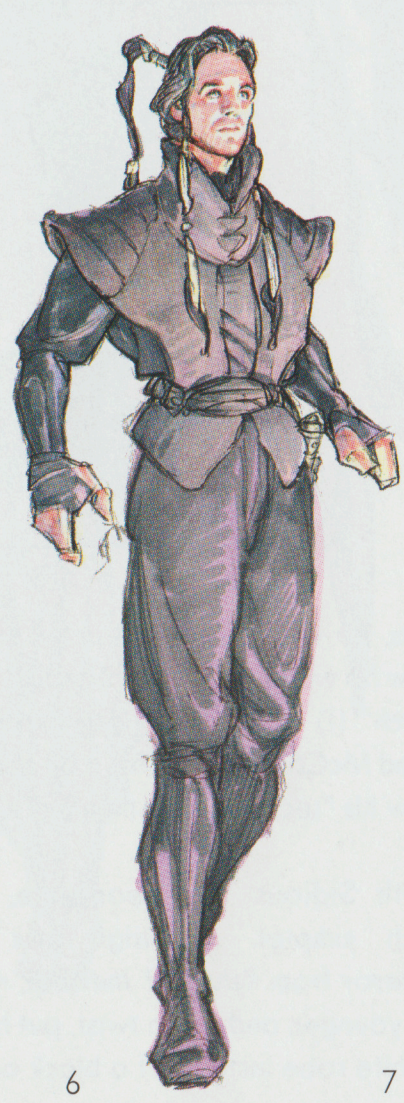
Obi-Wan Kenobi and Qui-Gon Jinn
1–3, 6–8 Iain McCaig
4, 5 Kun Chang



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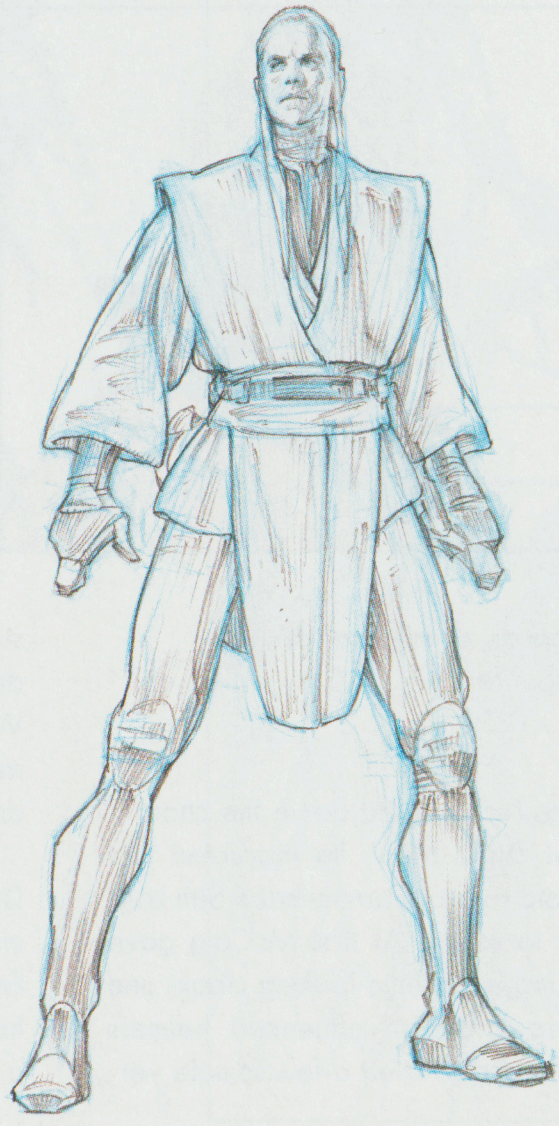

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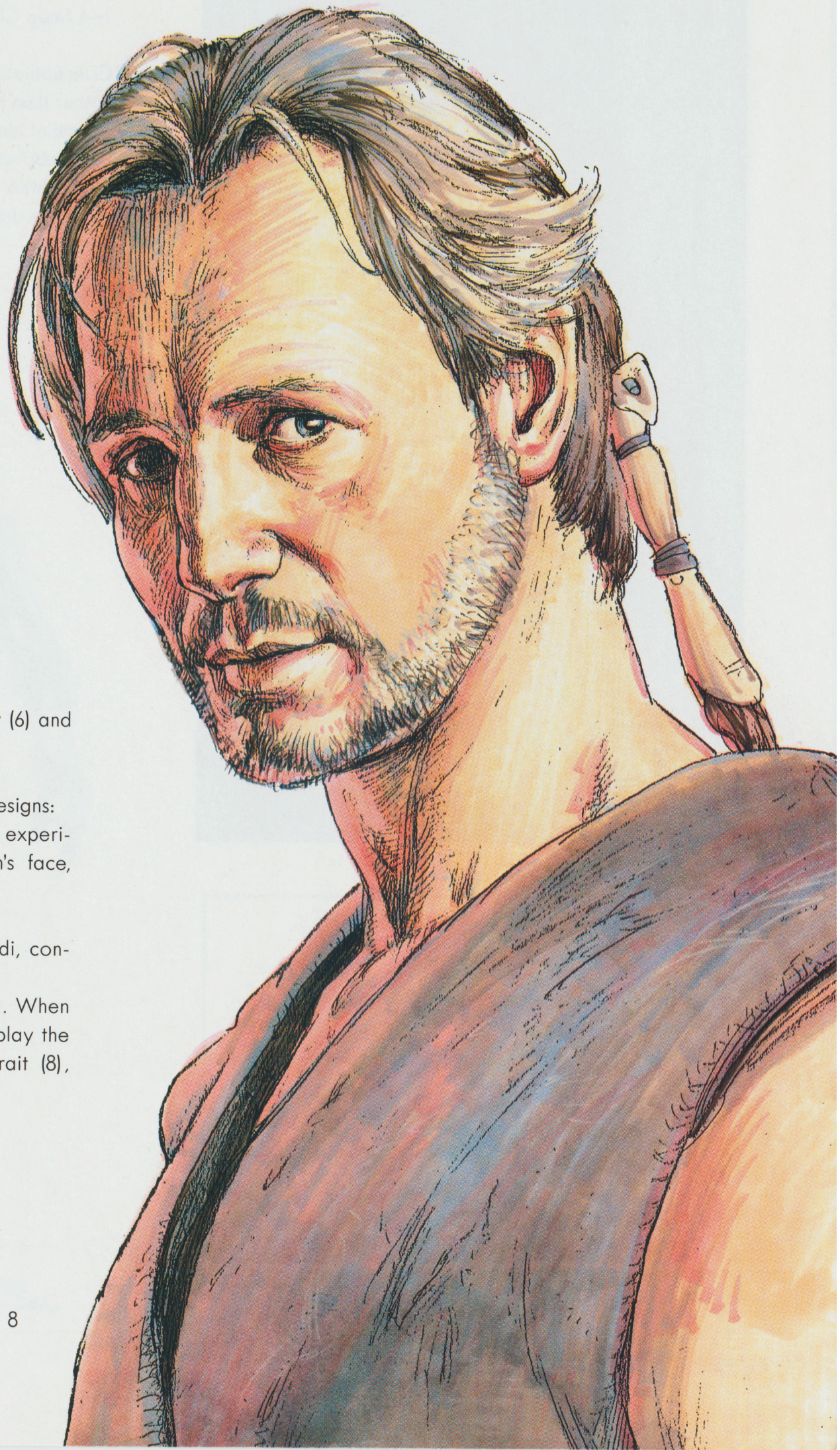


Obi-Wan Kenobi's full-length costume, early (6) and later conceptual designs (1–7)

Obi-Wan as the younger Jedi, conceptual designs:
Before Ewan McGregor was cast, McCaig experimented with different looks for Obi-Wan's face, ranging from smooth to coarse (3, 6).

Qui-Gon Jinn as the younger and elder Jedi, conceptual designs:
McCaig initially drew a young Qui-Gon (2). When Lucas finally decided that Qui-Gon should play the role of mentor, McCaig drew a new portrait (8), based on Liam Neeson.

Jedi lightsabers, conceptual designs (4)

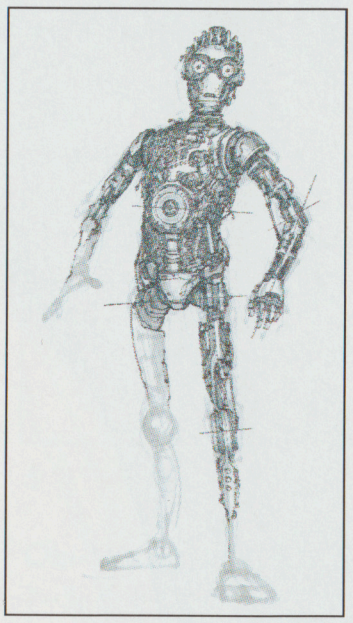
Qui-Gon's hologram projector,
conceptual design (5)

1

C-3PO

1–4 Doug Chiang

Conceptual painting and designs:
Rather than have C-3PO be completely unstructured, the initial idea was to have him sport an automotive-type substructure (1). Lucas, however, felt that this was a little too structured, and Chiang "disassembled" the droid (2, 4) until Lucas was satisfied (3).



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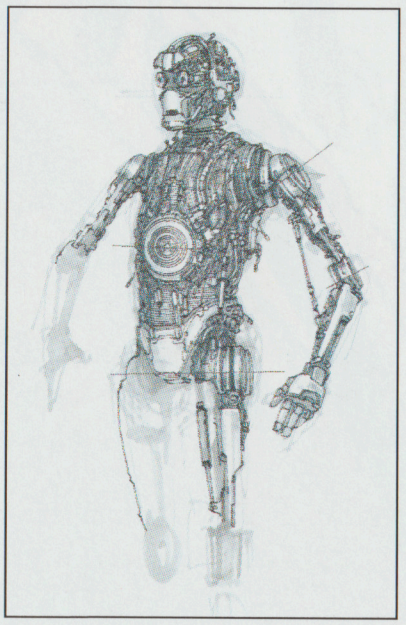

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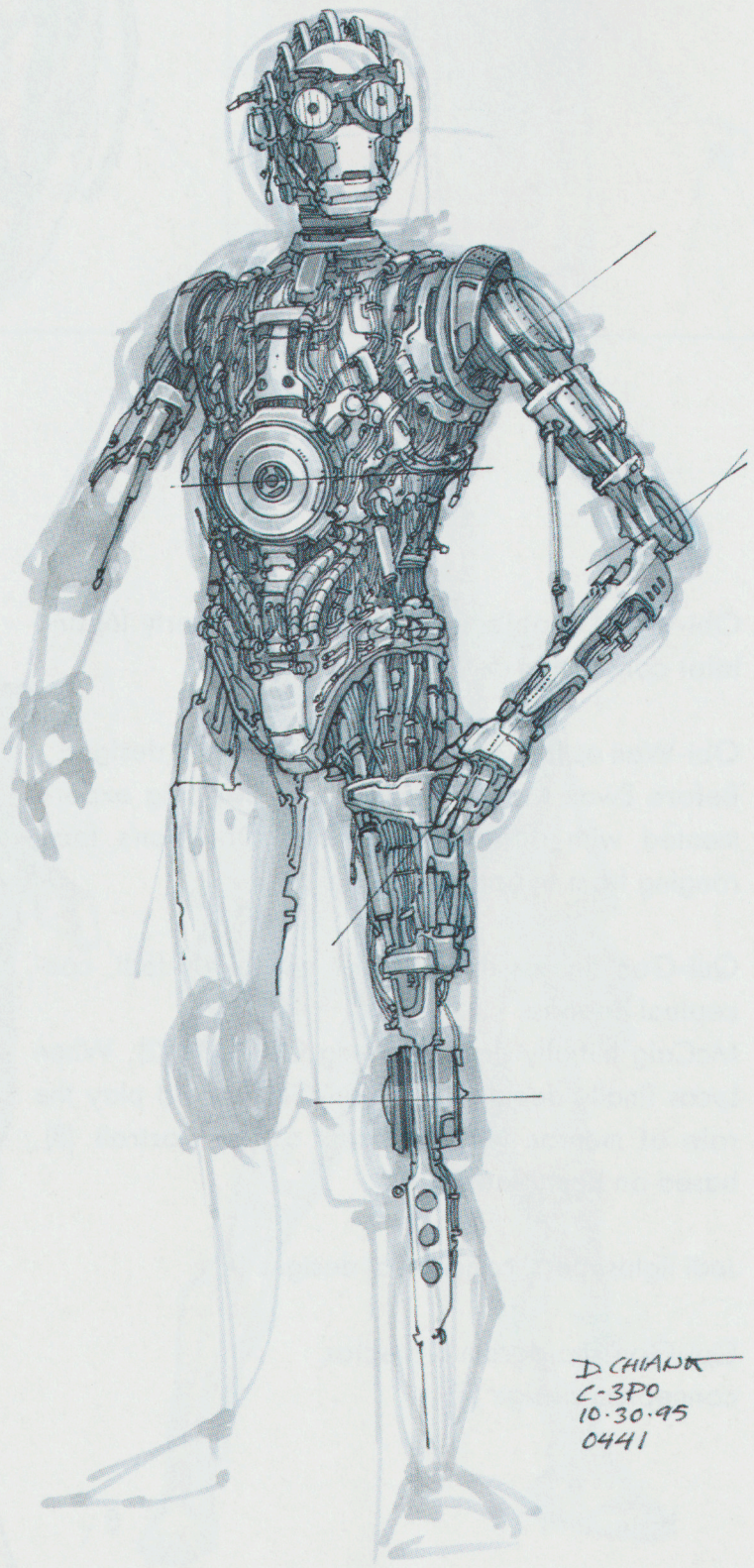

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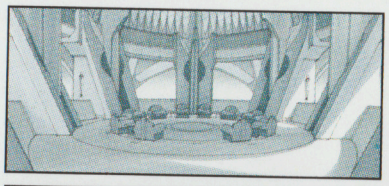
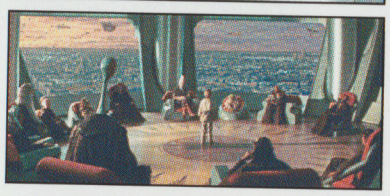
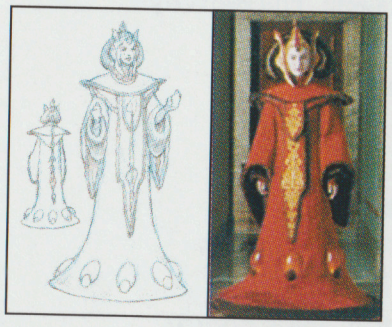
From Sketch to Screen

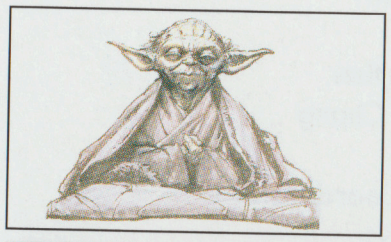




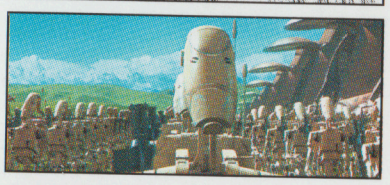
Jedi Council Chamber
Conceptual design, Doug Chiang
Film set, Gavin Bocquet/UK design team



Queen Amidala's palace dress
Conceptual design, Iain McCaig
Finished costume, Trisha Biggar/costume dept.



Yoda
Conceptual design, Iain McCaig
Finished puppet, Nick Dudman/ Chris Barton/creature effects dept.



Droid/Gungan battle
Storyboard, Edwin Natividad
Finished film frame shot, ILM

Throughout the design process, George Lucas brought in members of the production team to consult with the art department. At these meetings, preparations were made for the transition from conceptual design to set construction, both digital and physical. Essentially, Lucas and the production team had to figure out how to take the theories presented by the sketches and models and put them into practice, ultimately committing them to film.

Production designer Gavin Bocquet, with the assistance of supervising art director Peter Russell, was placed in charge of drafting, designing, building, and decorating each and every set. Bocquet was also responsible for scouting locations and modifying them to suit the needs of the production. His knowledge of film stock, lighting, and lenses allowed him to advise all parties as to how a design would appear on film.

Set decorator Peter Walpole oversaw the placement of all the furniture, fixtures, accessories, and trimmings that bring a set to life. This meant that every last piece of junk in Watto's shop, every last curtain in Palpatine's apartment, and every individual flower adorning the walls of Theed had to pass Walpole's inspection.

Costume designer Trisha Biggar worked with concept artist Iain McCaig to turn his fanciful sketches into clothing that could be worn by the appropriate actor, and made certain every costume would look right on camera.

Creature effects supervisor Nick Dudman oversaw the creation of an army of alien costumes, ranging from Rodians and Quarren to the animatronically-controlled puppets such as Yoda and the Neimoidian facemasks. These mechanized creatures were constructed by a team of talented individuals led by animatronic model designer/workshop supervisor Chris Barton. Their work included the construction of elaborate artificial musculature systems made out of wires, springs, and miniature motors, all of which could be operated off-camera by remote control.

Director of photography David Tattersall was responsible for committing the live-action footage to film. He had to determine the overall composition of each scene, a particularly daunting task on a film such as Episode I, since many of the characters and much of the scenery wouldn't even exist until long after the cameras had rolled. Tattersall also had to be consulted on the geography of each scene in order to determine how many cameras should be used, where they should be set up, and what kind of camera moves would be possible. He provided valuable input concerning the color scheme of the sets and costumes, so that he might reconcile factors ranging from lighting to film stock to cameras, lenses, and filters.

Industrial Light & Magic visual effects supervisors John Knoll, Dennis Muren, and Scott Squires worked with animation director Rob Coleman and his team to create all the finished computer animation, and with a group led by model supervisor Steve Gawley to film all the miniature model and motion control camera work. They created nearly everything that didn't directly involve live actors. Their work included generating Jar Jar and the Gungans, the assault on Naboo and droidekas, the Podrace arena and Podrace, the space battle, and the Theed and Coruscant matte paintings. It was their work that transformed the more fantastic designs of the art department into reality and seamlessly integrated them with the live-action footage.

On a film like Episode I, in which every last frame of film is tweaked or touched-up, the line between the art and production teams often blurred. Much of the final look of the film was due to a smooth and creative collaboration between the art department and the members of the production team and their respective staffs. The results speak for themselves.

Art Department

Design Director
Doug Chiang

Production Designer
Gavin Bocquet

Supervising Art Director
Peter Russell

US Concept Artists
Iain McCaig, Terryl Whitlatch, Jay Shuster,
Edwin Natividad,
Kurt Kaufman, Marc Gabbana

Storyboard Artist
Benton Jew

Concept Sculptors
Tony McVey, Mark Siegel, Richard Miller,
Robert Barnes

Concept Modelmakers
John Goodson, John Duncan, Ellen Lee

Model Set Designer
Bill Beck

US Art Department Coordinators
Jill Jurkowitz, Blake Tucker

US Art Department Assistant
Tom Barratt

Pre-Visualization/Effects Supervisor
David Dozoretz

Pre-Visualization/Effects Artists
Evan Pontoriero, Ryan Tudhope, Kevin Baillie,
Jeff Wozniak, Alex Lindsay

Conceptual Researchers
David Craig, Jonathan Bresman, Koichi Kurisu

Set Decorator
Peter Walpole

Costume Designer
Trisha Biggar

Art Directors
Fred Hole, John King, Rod McLean, Phil Harvey

Art Director (Tunisia)
Ben Scott

Draughtsmen
Paul Cross, Neil Morfitt, Gary Tomkins,
Toad Tozeur, Julie Philpott,
Jane Clark-Pearce, Philip Elton, Mike Bishop,
Lucy Richardson

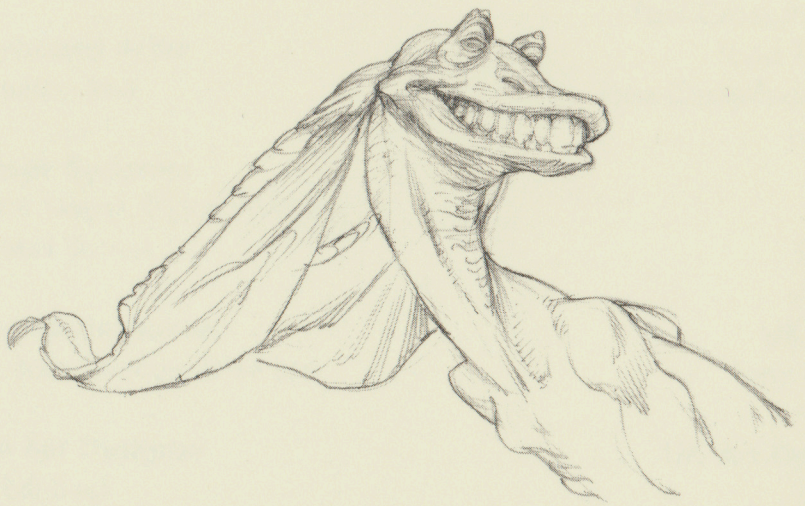
Scenic Artist
James Gemmill

UK Concept Artists
Tony Wright, Kun Chang

UK Art Department Coordinator
Laura Burrows

Junior Draughtsmen
Helen Xenopoulos, Remo Tozzi

Sculptors
Eddie Butler, Tessa Harrison, Richard Mills,
Keith Short, Richard Smith

3-D Computer Modellers
Caine Dickinson, Simon Dunsdon

UK Art Department Assistants
Christopher Challoner, Iain McFadyen,
Claire Nia Richards, Emma Tauber